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THESIS

AN ANALYSIS OF THE BUDGET FORMULATION AND EXECUTION PROCESS IN UNITED STATES NAVAL DENTAL CENTERS AND PERFORMANCE MEASURE UTILIZATION IN THE PROCESS

by

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December 2002

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The purpose of this research is to examine the Planning, Programming, and Budgeting process within the Naval Dental Centers (NDCs) as well as their particular budget formulation and execution procedures. Since there has been no extensive research done concerning budgeting and Naval Dental Centers, this thesis stands as a small-scale representative of budgetary processes in this small but vital section of the military. Moreover, the lack of dental readiness among personnel of operational commands recently debated in Congress during the summer of 2002 illustrates the critical nature of this topic. To analyze the topic in depth, the following points, among others, concerning budgetary policies of Naval Dental Centers must be examined; how do NDCs fit in the overall budgeting process of the Navy, how do NDCs formulate and execute budgets, what are their core missions, how do marks and reclamas affect the process, what factors affect the disparity between the funding NDCs request and what they actually receive, what performance measures are compiled and what role do they play in the budgeting process. The specific goal of this study is to provide prospective NDC comptrollers with the insight into procedures, technicalities, and peculiarities of a Medical Service Corps comptroller's job in a Naval Dental Center command.

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LIST OF ACRONYMS

ADA	Anti-Deficiency Act
AG	Activity Group
APF	Annual Planning Figures
BAG	Budget Activity group
BDC	Branch Dental Clinic
BES	Budget Estimate Submission
BSO	Budget Submitting Office
BUMED	Bureau of Medicine and Surgery
CBR	Congressional Budget Resolution
CEU	Continuing Education Units
CIA	Central Intelligence Agency
CJCS	Chairman, Joint Chiefs of Staff
CMC	Commandant U.S. Marine Corps
CME	Continuing Medical Education
CNO	Chief of Naval Operations
CO	Commanding Officer
COMPACFLT	Commander, Pacific Fleet
CONUS	Continental United States
CP	Capability Plans
CPAM	CNO's Program Assessment Memorandum
CRA	Continuing Resolution Authority
CSPG	CNO's Strategic Planning Group
DC	Dental Corps
DFA	Director for Administration
DFAS	Defense Finance and Accounting Service
DFR	Director for Resources
DHI	Dental Health Index
DIA	Defense Intelligence Agency
DoD	Department of Defense
DPG	Defense Planning Guidance
DRB	Defense Resources Board
DTF	Dental Treatment Facility
DWV	Dental Weighted Values
EF/MCD	Expanded Functions / Multi-chair Dentistry
ERB	Equipment Review Board
ESC	Executive Steering Committee
FAA	Fund Administering Activity
FASTDATA	Fund Administration and Standardized Document Automation
FMMTC	Financial and Materiel Management Training Course
FTE	Full-time Equivalent
GPRA	Government Performance and Results Act
HSO	Healthcare Services Office
LRPO	Long Range Planning Objectives
MC	Medical Corps
MEDRUPMIS	Medical Reserve Utilization Personnel Management Information System

MSC	Medical Service Corps
MTF	Medical Treatment Facility
NC	Nurse Corps
NDC	Naval Dental Center
NMSD	National Military Strategy Document
NOA	New Obligational Authority
NSS	National Security Strategy
OCONUS	Outside of the Continental United States
ODR	Operational Dental Readiness
OMB	Office of Management and Budget
OPNAV	Office of the Chief of Naval Operations
OPTAR	Operating Target
OSD	Office of the Secretary of Defense
PDM	Program Decision Memorandum
PM	Performance Measures
POIC	Petty Officer in Charge
POM	Program Objective Memorandum
PPB	Planning Programming and Budgeting
PPBS	Planning Programming and Budgeting System
SAG	Subactivity Group
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SMART	Summarized Medical Analysis Resource Tool
STARS-FL	Standard Accounting and Reporting System-Field Level
SWOT	Strengths Weaknesses Opportunities Threats
TMA	Tricare Management Activity
TOA	Total Obligational Authority
UIC	Unit Identification Code
USD	Under Secretary of Defense
VA	Veterans Administration
XO	Executive Officer

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CAPT Kirby and CAPT Karaman, Commanding Officer and Executive Officer, respectively, of Naval Dental Center Southwest for welcoming us into their command to conduct research and interviews.

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I. INTRODUCTION

A. PURPOSE

The purpose of this research is to examine the Planning, Programming, and Budgeting process within the Naval Dental Centers (NDCs) as well as their particular budget formulation and execution procedures. Since there has been no extensive research done concerning budgeting and Naval Dental Centers, this thesis stands as a microcosm of budgetary processes in this small but vital section of the military. Moreover, the lack of dental readiness among personnel of operational commands recently debated in Congress illustrates the critical nature of this topic. To analyze the topic in depth, the following points, among others, concerning budgetary policies of Naval Dental Centers must be examined: how do NDCs fit into the overall budgeting process of the Navy: how do NDCs formulate and execute budgets; what are their core missions and which ones are nearly always funded; how do marks and reclamas affect the process; what factors affect the disparity between the funding NDCs request and what they actually receive, what performance measures are compiled; and what role do they play in the budgeting process. The specific goal of this study is to provide prospective NDC comptrollers with the insight into procedures, technicalities, and peculiarities of a Medical Service Corps comptroller's job in a Naval Dental Center command.

B. RESEARCH QUESTIONS

The primary question that this thesis seeks to answer is: What are the budget formulation and execution processes

for Naval Dental Centers? In addition to the primary question, five subsidiary research questions will be addressed:

- What is the Planning, Programming, and Budgeting process in conjunction with Naval Dental Centers and what is the role that NDCs play?
- What are the core missions and scope of demands for Naval Dental Centers (NDC) and their branch dental clinics, and what are the most important issues that generally get funded? What factors affect the disparity between the funding NDCs request and what they actually receive.
- What are the performance measures used by the Naval Dental Centers and how are they used in the budgeting process?
- How do the budgeting process and performance measure utilization in the dental centers of the Navy compare with those of the Army and Air Force?
- How useful are these performance measures in this organizational environment?

C. SCOPE AND LIMITATIONS

This thesis consists of an in-depth description of the structure of Navy Medicine as organized under the Bureau of Medicine and Surgery, all the way down to the level of the Naval Branch Dental Clinics (BDCs). Furthermore, the PPBS process will be described in brief, as it applies to NDCs. Also, the NDCs and their BDCs missions and unique funding requirements are analyzed. In addition, we have also analyzed the unique aspects of Naval Dental Centers concerning budget builds and execution, the mark and reclama process, and mid-year review. We also examine the role of the branch clinics in the budget formulation and execution process, with regard to their core missions, budget input formulation, scope of demands, and important

issues funded. Moreover, we also examine the performance measures used in dental centers, their uses, and how they factor into the budget formulation and execution process. Lastly, this thesis compares and contrasts the budget formulation and execution processes of NDCs to their counterparts in the Army and the Air Force.

Because of time and content constraints, we have not included an in-depth analysis of the entire PPB process in this thesis. We do not intend to repeat what has been written in available textbooks and instruction received in classroom sessions. Also, not all NDCs were surveyed. Finally, this research serves not as a critical analysis of what should be done but simply as an anecdotal elaboration of current knowledge.

D. LITERATURE REVIEW AND METHODOLOGY

To gather the information needed for this thesis we conducted a literature search of books, magazine articles, journals, World Wide Web, DOD references, and other library information resources. Also, we interviewed six current and former NDC comptrollers, either by phone or in person. Since we had more than twenty questions, we did not ask all six interviewees to respond to all our questions. Doing so would have been too time-consuming, especially over the telephone. We therefore subjected only two interviewees (whom we interviewed face to face) to all twenty questions, and asked the rest different portions of our question categories.

A visit to NDC Southwest was made for an on-site interview with the comptroller and to ensure that we obtained samples of Navy Dentistry performance measures.

To obtain information from the BDCs perspective, we interviewed the Supply Petty Officer at the Naval Dental Branch Clinic at Monterey

E. DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

Several terms will be defined as they arise in the text. A list of abbreviations and acronyms is provided after the List of Tables.

F. CHAPTER SUMMARY

This thesis is organized into five chapters.

Chapter I is the introduction.

Chapter II is a brief description of the mission of the Navy Medical Department, and its Navy Dental organizations. This is from the Bureau of Medicine and Surgery to the Branch Dental Clinics. In addition, the PPBS process and the DOD Financial Management Organizations involved will be succinctly introduced. This is to show the upward flow of budget requests all the way to Congress, and the resulting downward flow of funding, down to the level of the BDCs.

Chapter III provides an in-depth explanation of the NDCs as major commands involved in the PPB process. Their core missions and the resulting impacts to the NDCs budget formulation process are discussed. It also describes the mark and reclama process that NDC comptrollers participate in and how they deal with it. Lastly, Chapter III shows how Navy Medicine conducts its midyear review and how comptrollers prepare for that activity.

Chapter IV initially addresses performance measures in general, their history, and their use in the federal government. Then, the chapter's discussion shifts to the performance measures used by NDCs, and how they affect the budget formulation and execution process. Concluding the chapter is a commentary on the NDC performance measures.

Chapter V shows the conclusions that we have arrived at based on an analysis of the responses provided by the interviewees as discussed in Chapters III and IV. The conclusions are classified as either specific or general, depending on the aspect of budgeting being discussed. Along with the conclusions are our recommendations for improvement, if not already provided by the interviewees. Finally, we also provide suggestions of areas for further research.

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II. NAVY MEDICAL DEPARTMENT

A. MISSION OF THE NAVY MEDICAL DEPARTMENT

The Navy Medical Department is comprised of the Medical Corps, Dental Corps, Medical Service Corps, Nurse Corps, Hospital Corps, and the Dental Technicians. Navy Medicine's main mission is to administer the commands and facilities that provide medical and dental services to active duty service members and other eligible beneficiaries, as well as the activities under the Bureau of Medicine and Surgery, and other medical and dental departments of other major claimants and offices. [Ref 9]

1. Bureau of Medicine and Surgery

The Bureau of Medicine and Surgery (hereinafter referred to as BUMED, and/or Claimancy 18) is the headquarters of the Navy Medical Department. It is headed by a Medical Corps admiral, known as the Chief, BUMED, dual-hatted as the Surgeon General of the Navy. Falling under the command of the Chief of Naval Operations, Chief, BUMED commands BUMED, and shore activities as assigned by the Chief of Naval Operations. [Ref 9]

Among the various functions of BUMED, one of the most complex and important is in the area of resource management. Working through the Assistant Chief for Resource Management/Comptroller, BUMED formulates principles and policies, and prescribes procedures and systems which will exercise effective control over the financial operations of the BUMED claimancy. Furthermore, it justifies and ensures optimum use of resources for the efficient delivery of health care. It also develops and

maintains an integrated fiduciary system that is both accurate and responsive to the Office of the Chief of Naval Operations, Navy Comptroller, Office of the Secretary of Defense, Office of Management and Budget, and Congress.

2. Resource Management and Comptroller Directorate (M8)

The Assistant Chief BUMED for Resource Management/Comptroller, BUMED, heads the M8 directorate of BUMED. The M8 directorate is comprised of four divisions. These are the Accounting (M84), Budget (M83), Program Analysis and Evaluation (M81), and Reports and Statistics Divisions (M82). [Refs 7 and 9]

a. Accounting (M84) Functions

- Administer the appropriation accounting systems in the claimancy to include the Fund Administration and Standardized Document Automation (FASTDATA) System, Summarized Medical Analysis Resource Tool (SMART), and the Standard Accounting and Reporting System-Field Level (STARS-FL)
- Oversee Navy resource system management for the entire claimancy
- Provide fiduciary reporting
- Oversee the Third Party Collections Program for Claimancy 18

b. Budget Division (M83) Functions

- Oversee the budget preparation/formulation process for the entire claimancy
- Monitor the budget execution for all commands in the claimancy
- Allocate funds to the commands in the claimancy

- Conduct the mid-year review for all commands in the claimancy
- Conduct shortfall management where necessary

c. Program Analysis and Evaluation (M81) Functions

- Provide the Surgeon General/Deputy Surgeon General, and the BUMED headquarters directorates with cross-cutting independent objective analysis of Navy Medicine programs, policies, and performance
- Conduct mid-and long range analysis and assessment of programs, plans, and alternatives
- Provide programmatic recommendations based on analyses in support of DHP planning and program guidance
- Function as resource sponsor for M8- assessments
- Manage the program review phase of PPBS
- Oversee and report on program compliance
- Manage and provide appropriate data access at all levels of Navy Medicine
- Review, validate, and execute modeling and simulation used in the program planning and assessment processes

d. Reports and Statistics (M82) Functions

- Provide the Assistant Chief for Resource Management and other BUMED headquarters directorates with internal claimant performance reporting and statistical analysis
- Develop and maintain a reporting system for the measurement of performance, program status, and trends against approved programs, budget plans, and schedules
- Manage the beneficiary population forecasting and analysis process

- Develop policy for and have oversight of the Navy Medicine Management Control Review Program
- Develop policy for and have oversight of a program of internal controls for BUMED headquarters
- Develop policy and have oversight of inter-service and intra-governmental support
- Oversee and coordinate external audit agency liaison
- Provide representation in the development of tri-service resource system

3. Dental Operational Support Directorate (M3)

The Assistant Chief for Dental Operational Support, BUMED, heads the M3 directorate of BUMED. He is responsible for the development, direction, and evaluation of all dental health care policies and treatment programs. He translates these policies and programs into action plans, while ensuring the effective use of resources that promote and safeguard the dental health of authorized beneficiaries. He secures adequate dental resources and trained personnel for dental programs to meet Navy and Marine Corps contingency plans. Furthermore, he develops and implements dental fleet support programs. He monitors the funding and execution of all Department of the Navy dental programs. [Refs 6 and 9]

4. Naval Healthcare Support Offices

Healthcare Support Offices (hereinafter referred to as HSO) function as field offices of the BUMED. Located in Norfolk, Virginia, Jacksonville, Florida, and San Diego, California, the three HSOs support the Chief, BUMED in the delivery of medical and dental care in the Navy. This is

accomplished by providing information, consultation, situational training, technical, and professional support, and oversight in resource management, healthcare operations, and facility support to activities of the Navy Medical Department and contingency planning to medical treatment facilities. [Ref 9]

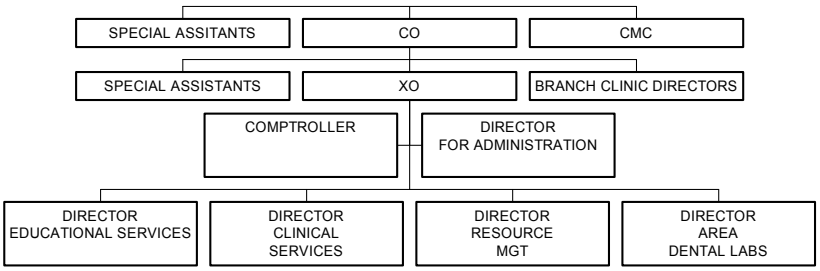
5. Navy Dental Treatment Facilities

a. Naval Dental Center

Established by authority of the Secretary of the Navy per OPNAVINST 5450 series, a Naval Dental Center (hereinafter referred to as NDC) is an established shore activity and is the principal organizational entity in the dental health care system. NDCs are naval shore activities operating under the command of Navy and Marine Corps responsible line commanders, who ultimately serve under the authority of echelon II Navy commanders (i.e., Fleet Commanders, CNET, and COMNDW). [Ref 9]

Figures 1, 2, and 3 show examples of NDC organizational structures.

MAJOR NAVAL DENTAL CENTER



SUGGESTED BUT OPTIONAL

Figure 1. Major NDC Organizational Chart.

CONSOLIDATED DENTAL BATTALION / NAVAL DENTAL CENTER

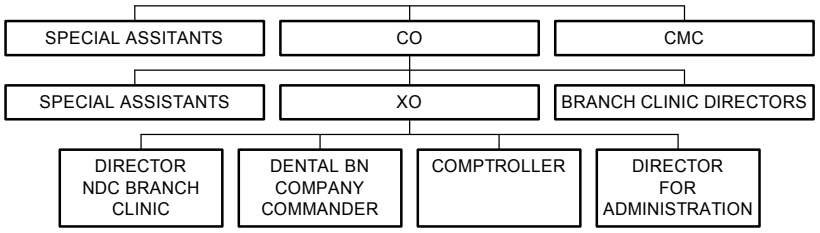


Figure 2. Consolidated Dental Battalion/NDC Organizational Chart.

OTHER NAVAL DENTAL CENTERS

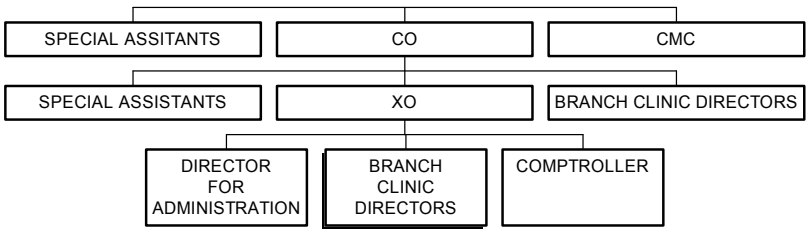


Figure 3. Other NDC Organizational Chart.

(1) NDC Functions.

- Provides comprehensive dental services to Navy and Marine Corps units of the operating forces, shore activities, and other authorized personnel in the assigned geographic area as prescribed by Title 10, U.S.C., and other applicable directives
- Operates assigned component dental care facilities
- Ensures that all assigned military personnel are both aware of and properly trained for the performance of their contingency and wartime duties
- Ensures that the clinic and its component facilities are maintained in a proper state of materiel and personnel readiness to fulfill wartime and contingency mission plans
- Provides, as directed, dental care services in support of the Navy and Marine Corps units of the operating forces and shore activities to ensure

the highest possible degree of operational readiness of these forces and activities

- Conducts appropriate education programs for assigned military personnel to ensure both military and dental health care standards of conduct and performance are achieved and maintained
- Participates as an integral element of the Navy and Tri-service Regional Health Care System
- Cooperates with military and civilian authorities in matters pertaining to public health, local disasters, and other emergencies

b. Branch Dental Clinic

A branch dental clinic (BDC) is a dental healthcare facility capable of providing comprehensive dental healthcare, but is dependent upon consultative, administrative, and financial support from its parent naval dental center, as assigned by the Chief of Naval Operations.

B. KEY PERSONNEL IN DENTAL TREATMENT FACILITIES

1. Commanding Officer

a. General Duties

The highest-ranking Dental Corps Officer in an NDC is the Commanding Officer (also known as CO). He is charged with accomplishing the economic, effective, and efficient performance of functions and operations of the NDC and all clinics that fall within his area of responsibility. He is responsible for the professional dental care and services given to all patients in the

clinics, as well as the safety and well-being of the entire command. [Ref 9]

2. Executive Officer

a. General Duties

The executive officer is the second in command of the NDC and all dental clinics under the NDCs responsibility. He assumes command in the absence of the commanding officer. In performing his duties, the executive officer must conform to and effectuate the policies and orders of the commanding officer and must keep the commanding officer informed of all significant matters that pertain to the command. He is primarily responsible under the commanding officer for the organization, performance of duty, operational readiness, provision of dental care services, training plan, and good order and discipline of the entire command. [Ref 9]

3. Director for Dental Center Administration

a. General Duties

The director for dental center administration (also known as the DFA), is a Medical Service Corps officer assigned to the command as such. He is the principal staff advisor to the commanding officer, via the executive officer for the coordination and efficient operation of all functions relating to materiel, manpower, civilian personnel matters, enlisted training, and the implementation of policy and standards pertaining to management functions. He confers with the director, fleet

and FMF support operations, director, dental services, director area dental laboratory, and all the directors of the branch clinics on matters of mutual concern. [Ref 9]

4. Director for Resources

a. General Duties

The director for resources (hereinafter referred to as comptroller) in a Naval Dental Center is a Medical Service Corps officer. He is the commanding officer's primary advisor on all fiscal matters that include but are not limited to budget formulation and execution, and to the efficient allocation of supply, equipment, and materiel resources within the command. He manages administrative functions to include budgeting, accounting, manpower, personnel, operating and facilities management, property procurement and distribution, Reserve affairs, and preparation of required reports, records, and correspondence. [Ref 9]

5. Director, Branch Dental Clinic

a. General Duties

The commanding officer assigns a director for every Branch Dental Clinic. As the most senior Dental Corps officer in the clinic, he is responsible to the commanding officer for the coordination of clinical and administrative services, via the executive officer. All orders issued by the director, branch clinic, will be regarded as coming from the commanding officer. He confers with the director, dental clinic administration, the

director, fleet and FMF support operations, director dental services, and director, area dental laboratory on matters of mutual concern. [Ref 9]

6. Petty Officer in Charge, Supply, Branch Dental Clinic

a. General Duties

Each branch dental clinic has a Petty Officer in charge for supply (also known as the Supply Petty Officer). Designated as such by the Director, Branch Dental Clinic, the Supply Petty Officer monitors the Operating Target for the clinic by updating its account of all expenses and available funds. He is further tasked to frequently coordinate with the comptroller in keeping his OPTAR accounts up to date. He processes all supply requisitions for the entire clinic, and is usually the only authorized user of the Government Purchase Card for procurements.

C. KEY COMMITTEES IN NAVAL DENTAL CENTERS

1. Executive Steering Committee

The Executive Steering Committee (ESC) is a cross-functional board composed of the Commanding Officer, Executive Officer, Director for Administration, Director for Dental Services, Director for Fleet and FMF Support Operations, Director for Area Dental Laboratory (applicable only for NDC Southwest, and NDC Norfolk), Director for Resources, and the BDC Directors. The main function of the ESC is to assist the Commanding Officer in setting the strategic direction of the NDC. Furthermore, it convenes periodically, or as ordered by the CO, to discuss

prevailing command issues and to provide recommendations to the Commanding Officer.

2. Equipment Procurement Review Board (EPRC)

The Equipment Procurement Review Board (EPRC) is a cross-functional committee tasked with prioritizing the NDC's equipment requests, in preparation for submission to higher authorities. Chaired by the Executive Officer, the EPRC is composed of the members of the ESC (less the CO), the Director for Information Technology, and a representative from the Biomedical Repair Department. The EPRC is also referred to as the Equipment Review Board (ERB).

D. DEPARTMENT OF DEFENSE FINANCIAL MANAGEMENT ORGANIZATIONS AND THE PLANNING, PROGRAMMING, AND BUDGETING PROCESS

1. The DOD Financial Chain of Command

There are numerous DOD entities involved in the budgeting process. The generic model for the Navy is illustrated by Figure 4 below. The most basic unit entity in this chain is the cost center. At this level, a cost center can be a department within a specific command, or a separate, smaller command. For the latter, the term "cost center" is a misnomer. It is an independent command, with its own commanding officer, but because it is smaller in size and scope of operation compared to the medical treatment facility in its immediate vicinity, it falls "under" the larger commands. This is especially true in overseas locations. These smaller commands are known as "chargeable Unit Identification Codes". The cost centers

receive a suballotment of their parent command's funds. This suballotment is known as an operating target or OPTAR.

Next level up is the Fund Administering Activity (FAA). The FAA's primary responsibility is to manage the funds it receives and allot the money among the cost centers. FAAs are given the major responsibility and full accountability of assuring that they do not overspend their budget in accordance to section 1517 of the Anti-deficiency Act (ADA) which,

> Prohibits any officer or employee from making or authorizing a commitment, obligation, or expenditure in excess of the amount available in an appropriation or subdivision thereof (e.g., operating budget or allotment) or in excess of the amount permitted by agency regulations. This particular section of the U.S. Code is also one of the sections comprising the Antideficiency Act, discussed in a later topic. [Ref 5]

By law, the Commanding Officer and his comptroller take full responsibility for that. Referring back to chargeable UICs, it is true that the ADA 1517 responsibility does not fall on them, however, they are still charged with fiscal responsibility to properly manage their funds within the specified guidelines under the law, as are FAAs.

The FAA's are responsible to the major claimants. Examples of these in the fleet are COMMANDERPACFLT or Naval Sea Systems Command. Above the major claimants are the responsible offices. Those are the codes that fall under the CNO's office. These offices act as both resource sponsors and appropriation sponsors. Resource sponsors

have purview over an identifiable group of resources constituting certain warfare and supporting warfare tasks. Appropriation sponsors on the other hand, are responsible for supervisory control of an appropriation, for program feasibility, the budget process, and reprogramming within an assigned appropriation. At the very top of the Navy financial chain of command is the service financial manager, the Assistant Secretary of the Navy (Financial Management and Comptroller). [Refs 4 and 5]

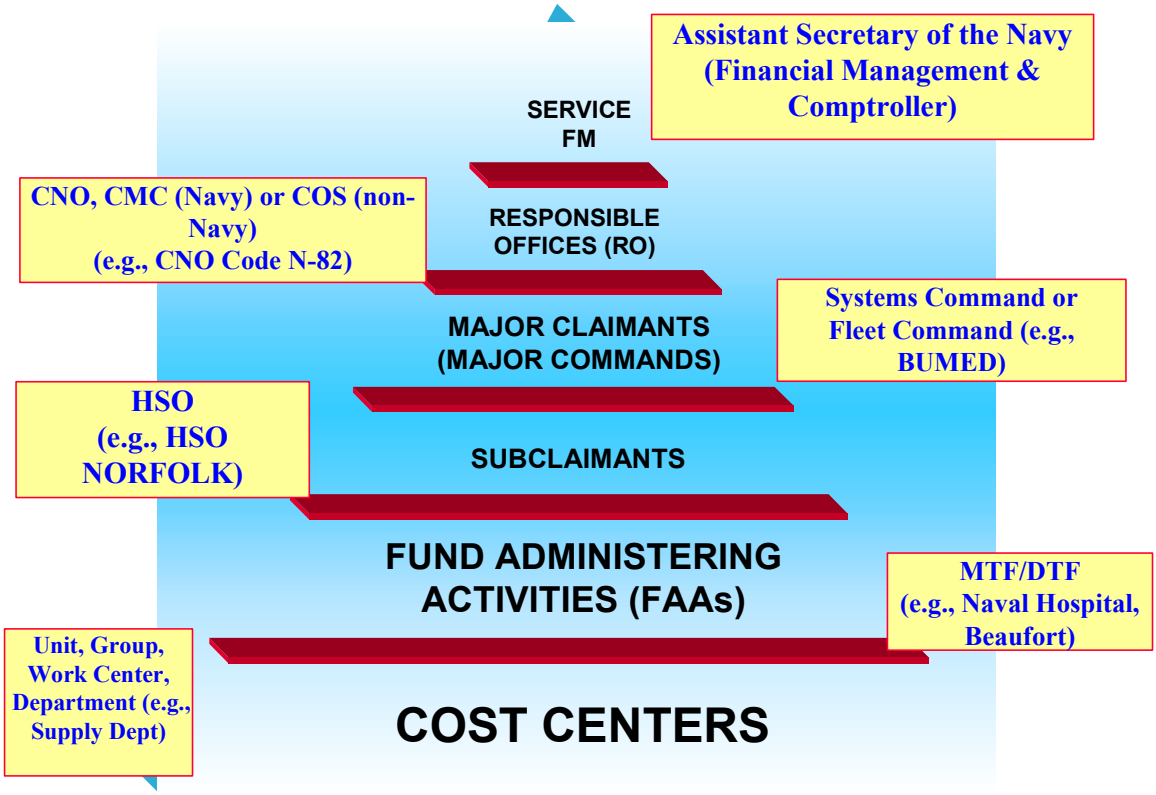


Figure 4. Navy Financial Chain of Command.

2. The Planning, Programming, and Budgeting System

The Planning, Programming, and Budgeting System (abbreviated as PPBS or also referred to as PPB) is the budget formulation process of the Department of Defense.

Conceptualized by former Secretary of Defense Robert McNamara and implemented during the Kennedy administration, the PPBS is a rigorous process used to allocate resources among competing programs while considering perceived threats. It was designed to focus less on incremental adjustments, while focusing more on objectives and purposes. The entire process seeks to develop a budget that is used to establish and execute programs, which are designed from strategies formulated to counteract an anticipated threat. The PPB has three major phases. [Ref 10]

a. Planning Phase

The first phase is the Planning phase. In this stage, the President issues the National Security Strategy (NSS), which details information on the national interests of the United States, global and regional trends, and other states' political, economic, and defense strategies. The NSS broadly outlines defense strategy for the country. This document is issued after analyzing the inputs received from various agencies to include the State Department, National Security Council, Congress, CIA, DIA, and other executive agencies. Upon receipt of the NSS, the Chairman, Joint Chiefs of Staff, in turn, issues the National Military Strategy Document (NMSD). This document is a compilation of recommendations by the JCS and Combatant Commanders for the President, the National Security Council, and the SECDEF. It outlines the national military strategy that the Armed Forces need to accomplish the objectives outlined in the NSS. This document also describes the fiscally constrained force structure required

for the military strategy recommended. The Secretary of the Navy (SECNAV), the Chief of Naval Operations, and the Commandant, United States Marine Corps co-author the Navy's portion of the NMSD.

With the NSS and the NMSD used as bases, the Office of Secretary of Defense, and the JCS develop the Defense Planning Guidance (DPG). This document is written with input from the services, Combatant Commanders, Office of Management and Budget, the National Security Council, and the State Department. The DPG is the ultimate product of the Planning phase. This document, along with the Fiscal Guidance, provides force, fiscal, and resource constraints that guide the services in their construction of their respective Program Objective Memoranda (POM), and budgets. It includes fiscal guidance at the Total Obligational Authority level for each of the services and defense agencies for the next six years. Ultimately, the signed DPG serves as the basis for the Programming phase.

b. Programming Phase

The programming phase contains the process of translating the information in the DPG into a financial plan of effective achievable programs that are ultimately contained in the Program Objective Memorandum (POM). Initially, each service develops its own POM. Inputs taken into consideration in its development include the Combatant Commanders, Component Commanders, Navy Integrated Warfare Architecture Assessments, resource sponsors, and major claimants. This entire process is characterized by the submission of recommendations/proposals, review and decision, the submission of justification for disapproved

items, and further review. The Navy staff conducts a final review, striving to achieve balance and coherence across all of the proposed programs. This preliminary Navy POM is then submitted and presented during the CNO “End Game”, a meeting that includes the Chief of Naval Operations (CNO), Commandant of the Marine Corps (CMC), and the Assistant Secretaries the Navy. In this meeting, the Navy POM receives its final review and is finalized.

The DON POM, along with the other services’ POMs, are submitted to OSD. Under the purview of the Defense Resources Board, the services’ POMs are reviewed and further deliberated upon. The DRB includes the Deputy Secretary of Defense, representatives from organizations within OSD, and the Chairman of the Joint Chiefs. Again, the POM review process involves vigorous back and forth debates. The DRB makes a preliminary decision, the services are allowed to submit their appeals, then a final review and decision is made. The final product of this process is the Program Decision Memoranda (PDM), which the Secretary of Defense officially signs.

The PDM is distributed to the services and serves as the SECDEF’s guidelines in their preparation of their respective budgets. This is the culmination of the Programming phase.

c. Budgeting Phase

The Budgeting Phase is performed in parallel with the Programming Phase. It is in this stage wherein the budget is expressed as the financial requirements necessary to execute the approved programs developed during in the prior phases. The executive agencies primarily responsible

for this phase are the DOD comptroller's office and the Office of Management and Budget (OMB).

Following the guidelines contained in the PDM, the services prepare their preliminary budgets, known as Budget Estimate Submissions (BES). The BES translates the programs into funding requirements and eventually, into appropriations from Congress. The Services submit their BESs to the OSD Comptroller. The OSD Comptroller and the OMB consolidate, review, and make adjustments to the BES that result in a series of documents known as the Program Budget Decisions (PBDs). The PBDs are finally discussed in meetings known as Major Budget Issue meetings, after which the the PBDs becomes part of the President's budget. The budgeting phase ends when the President formally submits his budget to Congress.

Figure 5 fully describes the PPBS process as discussed above.

Figure 5. Planning, Programming, Budgeting, Process, Flow Chart.

3. Congressional Defense Budget Process

The Defense Budget process terminates once OMB formally submits the President's budget to Congress. Once received, the Congressional Defense Budget Process starts. For its part, Congress follows a timetable that was established by the Congressional Budget Act of 1974. It has a three-stage process. First, Congress passes the Concurrent Budget Resolution (CBR). The CBR allows Congress to prioritize each government program in the federal budget, to set floors and ceilings on total budget authority and outlays, to allocate spending among functions (i.e., the national defense budget function), and to set targets for discretionary and mandatory spending. [Ref 10]

The second step involves the defense authorizations process, the bills that authorize the existence of defense programs and authorize the funding levels for such programs. The funding levels can be defined with a specific amount, or with the phraseology "as such funds as may be necessary" to implement the program. The Senate Armed Services Committee and its House counterpart, the House Armed Services Committee are responsible for the detailed review and report on defense authorization legislation to Congress. After giving their respective "mark-ups", each committee submits its bills to its respective house, wherein amendments are proposed. Each house votes on its respective version. The differences between the two versions are then resolved in a conference committee.

Establishing the programs does not also mean that funds have been appropriated for those programs. That necessitates step three in this process, the appropriations

process, which creates budget authority for the established programs. Congress each year passes 13 regular appropriations bills. The majority of national defense funding is contained in three appropriation bills, namely (a) the Defense Appropriations Bill, (b) the Military Construction Bill, and (c) the Energy and Water Development (for Department of Energy defense-related activities). Smaller funding amounts can be found in the Commerce-Justice-State, Atomic Energy, and other Defense-related bills. More than 95% of defense funding is usually contained in the Defense Appropriations bill.

If Congress fails to pass a regular appropriations act by October 1 of the new fiscal year, DOD will not have funding to pay for personnel, fund operations, and execute new contracts. Therefore, non-essential operations could cease, closing the doors of offices to day-to-day operations. In order to allow the government to function in the new fiscal year, Congress passes a continuing appropriations legislation, known as a Continuing Resolution Authority (CRA), to provide a stop-gap measure until regular appropriations are approved. The CRA typically authorizes government agencies to operate at the same funding rate within the same time period, as the last fiscal years.

Figure 6 illustrates the Congressional Budget process.

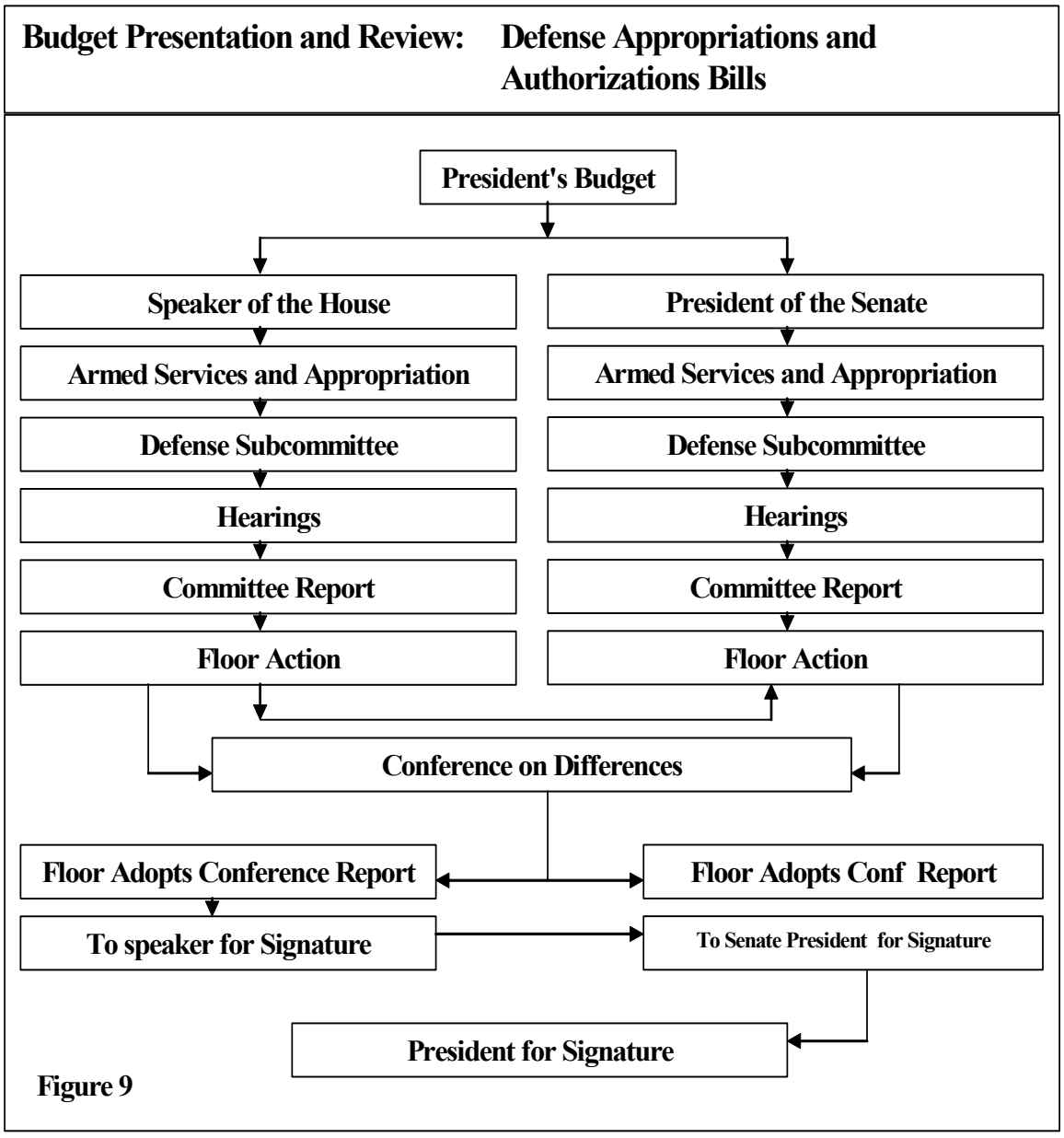


Figure 6. Congressional Budget Process Flow Chart.

4. Budget Execution

Once Congress passes all regular appropriations bills, funding is quickly disseminated to all levels of the government allowing them to spend in the new fiscal year. This is known as budget execution. The treasury authorizes agencies and departments to draw funds from accounts established by an appropriation. The agencies obligate and spend the funds as originally planned in their respective budget proposals. Although funds are appropriated for specified purposes in the legislation, the agencies such as DOD are given authority to transfer or reprogram funds to other programs. To define each, transfer is the shifting of funds from one program to another in different accounts (either in the same budget year or from one budget year to another). Reprogramming, on the other hand, is the shifting of funds from one program to another within the same budget account. This movement of funds gives the agencies the flexibility to provide funding for unplanned occurrences (i.e. unplanned military operations, unexpected increase in payroll, etc.). [Ref 10]

Since there are three kinds of reprogramming actions, government agencies have to comply with specific requirements before they reprogram funds. Basically, the three types of reprogramming actions differ in their requirements for Congressional notification and approval. These are the following:

1. Actions requiring congressional notification and approval:

- transfers between accounts
- any change to a program that is a matter of special interest to congress

- increases to congressionally approved procurement quantities

2. Actions requiring only notification of Congress:

- reprogrammings that exceed certain threshold amounts

3. Actions not requiring any congressional notification:

- reprogrammings below certain threshold amounts
- any reclassifications of dollar amounts “within an appropriation without changing the purpose for which the funds were appropriated.

E. CHAPTER SUMMARY

This chapter initially described the mission of the Navy Medical Department. Then, the structure of the Navy Medical Department is explained starting from its headquarters, the Bureau of Medicine and Surgery. BUMED’s functions, as to how it manages all the commands within its authority, were discussed. The review of Navy Medicine’s structure branched off towards the Navy Dentistry side all the way to the level of the Branch Dental Clinic. The key personnel and their functions to these individual organizations were introduced.

This chapter also briefly explained the DOD financial chain of command, and the Planning, Programming, and Budgeting System. It was shown how the DOD financial chain of command functioned within the PPBS.

III. THE PPB PROCESS AND NAVAL DENTAL CENTERS

A. NAVAL DENTAL CENTERS AND THE PPB PROCESS

Navy Medicine classifies Naval Dental Centers in either of two categories, either as a chargeable Unit Identification Code (UIC) or a Field Administering Activity (FAA), as is shown in Figure 4. Although classified as a chargeable UIC, an NDC should still follow the written guidelines of financial management for its command. If found negligent in their duties as fiscal stewards of the funds they are responsible for, commanding officers and comptrollers of chargeable UICs can be subject to severe administrative penalties as specified under the Uniform Code of Military Justice.

When budgeting for the future, NDCs function the same way as any FAA in the financial chain of command. They conduct their respective budget calls within their activities, consolidate these, and submit their command budget to the major claimant. For dental and medical treatment facilities in Navy Medicine, the major claimant would be BUMED. The M83 division of BUMED oversees the budget preparation aspect for Navy Medicine. It reviews all activity-level budget estimates. Any questionable changes are addressed to the appropriate activity for justification. When the budget estimates are approved, they are sent to the responsible office (where the resource sponsors and appropriation sponsors are) for further review. Acting as both resource sponsor and appropriation sponsor for Navy Medicine is the Director, Medical Resource, Plans and Policies Division, N0931.

The budget is submitted to the Navy comptroller (NAVCOMPT) for additional scrutiny. If NAVCOMPT disagrees with a major claimant's budget submission, they will write a mark (a proposed line item change) on the major claimant's budget submission. When they receive the marks, the major claimants are allowed to respond with position papers to justify their initial proposal. This is more commonly known as a reclama. NAVCOMPT can either accept the reclama as a valid justification or not. Any failure to submit a reclama or disapproval thereof would mean that the budget submitting offices (major claimant) must revise their budgets as marked by NAVCOMPT. Then NAVCOMPT includes the major claimant's budget into the Department of the Navy Budget.

When NAVCOMPT has fully prepared the Navy's budget, it then submits it to the Office of the Secretary of Defense (OSD) and the Office of Management and Budget (OMB). At both offices, the budget goes through a similar process of review, mark, reclama, and final preparation, to the one at the NAVCOMPT level.

The end product of this process is the President's budget which is next submitted to Congress. [Ref 10]

B. NAVAL DENTAL CENTER BUDGET FORMULATION

The following section is the data collected that pertain to NDC budget formulation. These information were collected through the various interviews and surveys conducted among the NDC comptrollers contacted.

Question: When does the budget call go out to the Branch Dental Centers?

Response 1: We send out a budget call to the OPTAR holders in their command around the first week of May and the inputs are due back in one month.

Response 2: We initiate our internal budget call process in June.

Response 3: We start our internal budget call process at the start of the 2nd quarter in February.

Interpretation and Analysis: If the inputs are due back into the Healthcare Support Offices later in the summer, the timing issue will always be a concern. The BDC is the bottom of the totem pole and the budgeting decisions start from the next rung up. BDCs will be in the middle of their third quarter when they must make budgeting projections for the following year. They should have some idea of what the needs for the coming fiscal year should be. When the commands initiate their informal budget calls is a matter of choice. The command from response 3 wants to get a head start on this process, to give the BDCs more time to compose their inputs.

Question: What budgetary requests are typically received from the BDCs?

Response 1: Typically, the BDCs do not ever ask for less, even if they know they are seeing fewer patients. The BDCs try to estimate OPTAR needs based on changes in outputs. Increases in the total number of commands the BDC is responsible for is the most common form of changing outputs. Another change in outputs could be based on the projected number of deployments. Ships' crews are also treated in BDCs. If a ship leaves port for a six-month

deployment, the patients that would be expected from that ship will be unavailable for one half of the fiscal year. Equipment requests are another component of the BDCs budgetary requests. These requests are for start-up programs for services that have not been provided in the past. The Equipment Review Board (ERB) handles other equipment requests, such as broken equipment and updating older equipment.

Responses 2,3,4: (Other comptrollers concurred that the requests basically constitute additional money, furniture and equipment. Consumables and new program starts constitute most of the requests received.)

Interpretation and Analysis: BDCs normally do not ask for less money. That is on par with nearly all other governmental entities. There is a constant desire to do more and to get more funding to do it. Even if workload decreases, the BDCs feel that they can still use the money in the budget to either 1) offer more services to the reduced population, or 2) finally have the requisite dollars per patient to effectively care for them.

Question: How do you determine the BDCs OPTAR amounts?

Response 1: One comptroller stated that they include the number of dentists working at the BDC and the number of patients seen into the setting of OPTAR amounts. That comptroller also stated that they only disburse the smallest amount that will allow them to operate and keep some money back for “showstopper” requests.

Response 2: Another comptroller uses the BDCs’ historical figures (prior year’s OPTAR, historical

productivity, etc). He does not keep back any sum from what the BDCs requested, but he does keep track of their execution rates.

Response 3: The BDC OPTARs are based on previous year's figures, plus any increases of military units within their area of responsibility.

Response 4: Based on historical data and some additional sum due to anticipated changes in workload.

Interpretation and Analysis: Basically, all comptrollers surveyed base OPTARs on the previous year's budget, adjusted for any increases in military units they are responsible for. The PPB process allows for a "base plus" budgeting system, especially at the lower levels where the dollar amounts are small. If the total number of military units the BDC is responsible does not change, then the OPTAR budget will not change. The total number of commands or patient population that a BDC is responsible for within its area of responsibility is the main driver of the amount of OPTAR the BDC will get. There may or may not be a performance measure tied to these dollars. On the other hand, this system is much quicker, easier, and equitable in dividing the dollars. Any other method, like zero-based budgeting or regression analysis forecasting, likely would not make much of a difference (not to mention being more time consuming) and the overall dollars for the NDC are small.

Question: What are the core missions of your command?

Response: All NDC comptrollers interviewed responded that their core mission was bringing all sailors within

their areas of responsibility to the highest state of dental readiness. That means treating them to become at least a Class 2. One comptroller stated that the core mission of his command was getting all sailors to a Class 2 or better with two exams a year. He said the three key issues were prevention, sealants and annual exams. The metrics used to track the progress of these important issues were the Operational Dental Readiness (ODR) and Dental Health Index (DHI). These measures will be further discussed in Chapter IV's discussion of metrics.

Interpretation and Analysis: These core missions speak to the duty of Navy Dentistry. That duty is ensuring the dental health of military members to enable them to do their job effectively.

Question: Which requests have a higher probability of funding?

Response 1: New programs, (e.g. multi-chair dentistry) along with the equipment and materials necessary for those approved programs, are generally the higher priorities. These programs are picked by the CO, or more often the XO, of the dental center and given priority.

Response 2: Fact-of-Life issues (e.g. funding for emergency leave travel for NDC staff from overseas locations, or buying a new sterilizer unit or else dental treatment ceases) get the highest priorities.

Response 3: Most, if not all, requests are granted because budgeting is incremental. Most of the time, clinics ask for more money every annual budget call. In

those cases, we in headquarters, ask the clinics to justify with data why the increase is necessary.

Interpretation and Analysis: It is clear that POM issues are prioritized higher. The comptroller cited in response 2 may have misunderstood our question. Fact of life issues can be quite broad. Specifically, they are classified as those situations that could not have reasonably been put in the POM, for these are mostly unexpected requirements, like contingencies or unexpected taskers. For example, an overseas NDC staff member receives a Red Cross notice of a death in his family (e.g. a parent) back in the continental United States (CONUS). If permitted by regulations, the command must fund that staff member's emergency leave travel to CONUS. The cost would be more if that staff member takes his entire family with him. Another example is the replacement of a mission-essential piece of equipment, like the only sterilizing unit in the command. If the sterilizer is beyond repair, or is not expected to last, then the command has to buy a new one, or else the command has to shut its doors to its patients. For these emergency cases, money allotted for other categories must be used to fund the new requirements. The resulting funding shortfall where the money was obtained has to be requested during the mid-year review, or within the fiscal year. To this extent, fact-of-life issues have more priority than issues included in the POM.

Question: What documents are sent to the BDCs?

Response: All the comptrollers responded that when they conduct a budget call they send a memorandum via email

from the CO authorizing the budget call. The memorandum indicates that the CO has mandated the budget call, the guidance that the BDCs need to follow in the budget call preparation, an Excel spreadsheet (Op 32 exhibit) with the appropriate categories that the BDCs have to fill in, submission deadline, and the points of contact in the NDC headquarters for further clarification.

Interpretation and Analysis: In the modern age of computers and networks, this mode of information exchange has become the standard. An example of the Op-32 spreadsheet is shown in Figure 7.

UIC: FMM43

SAG	ICC	ICC Desc	FY 99 Program	FY 00 Program	Foreign Currency Adjust	Price Growth Percent	Price Growth Amount	Program Growth	FY 01 Program
C2	308	Travel of Persons	1	1		1.60%	0	0	1
C2	920	Supplies & Mat	11	40		4.20%	2	0	42
C2	922	Equipt Maint Contract		1		1.60%	0	0	1
C2	925	Equipt Purchases	7	1		4.20%	0	9	10
C2	989	Other Contracts	3			4.20%	0	0	
FA	920	Supplies & Mat	24	17		4.20%	1	0	18
FA	925	Equipt Purchases	30	9		4.20%	0	21	30
FA	989	Other Contracts	660	302		4.20%	13	0	315
FA	9XX	Civilian Personnel Salary	39	41		0.00%	0	0	41
FC	634	Nav Pub Wrks Ctr-Utilities-In	237	245		-3.00%	-7	0	238
FC	920	Supplies & Mat		1		4.20%	0	0	1
FC	989	Other Contracts		1		4.20%	0	0	1
FD	989	Other Contracts	17	8		4.20%	0	0	8
FF	308	Travel of Persons	32	17		1.60%	0	0	17
FF	633	Naval Pub & Prnt Svc-Ind Fu	18	12		5.70%	1	0	13
FF	914	Purchased Communications		1		1.60%	0	-1	0
FF	920	Supplies & Mat	18	26		4.20%	1	0	27
FF	922	Equipt Maint Contract	1			1.60%	0	0	
FF	925	Equipt Purchases	8	18		4.20%	1	1	20
FF	989	Other Contracts	87	30		4.20%	1	0	31
FF	9XX	Civilian Personnel Salary	269	298		0.00%	0	0	298
FG	308	Travel of Persons	1	1		1.60%	0	0	1
FG	771	Commercial Transportation	6	5		1.60%	0	0	5
FG	920	Supplies & Mat	4	2		4.20%	0	0	2
FG	989	Other Contracts	8	6		4.20%	0	0	6
FG	9XX	Civilian Personnel Salary	38	43		0.00%	0	0	43
FJ	920	Supplies & Mat	2	1		4.20%	0	0	1

Figure 7. Op-32 Budget Submission Exhibit.

Question: What documents are sent to HSO to justify budget requests?

Response 1: We receive the Annual Planning Figures from the HSO. Once received, we fill in the spreadsheet indicating how the APF is allocated to Activity Groups and Sub-activity Groups. Once accomplished, we send that to the HSO.

Response 2: Using the point paper format, we try to justify a legitimate increase in our budget request with metrics. It is very important to defend the budget request increase with hard numbers to be able to get what you need. Point papers are usually used to justify other requests throughout the fiscal year when more money is being requested other than the budget. This is especially true during times of emergencies. These point papers need to be succinct and contain the data necessary to defend the request. Appendix A is an example of a point paper in a Business Case Analysis format.

Response 3: Since we are a chargeable UIC, we consolidate all our requests into one spreadsheet and send it to the Naval Hospital. When required, we utilize the point paper format to justify our requests. In it, we show hard numbers (e.g. projected increase in workload) to prove we need the additional funding.

Interpretation and Analysis: The requests are sent back to HSO using a simple spreadsheet. The incremental changes are sent along simply as small annual increases. In the budgeting world, incremental increases are usual occurrences. However, there are occasions when requests for money are more than incremental, such as for new programs like the multi-chair dentistry program mentioned earlier in this chapter. In those types of situations, it is important to send data justification. Data and metrics

create an environment where decisions can be more easily attainable and justifiable by being able to logically prioritize requests. When asking for additional funding from HSO or BUMED, the comptroller writes his justification in the form of a Business Case Analysis (BCA). A template for this can be obtained from the Navy Healthcare Support Office website. An example of this BCA is contained in Appendix A.

Question: How are equipment requests prioritized?

Response: For all of the commands, an Equipment Review Board (ERB) reviews all equipment requests and decides which requests will be funded first. The ERB includes the Command Executive Steering Committee and the clinic directors. How these requests are collected and the criteria used to develop the priorities do differ among the different commands. One command uses a combination of historical buys and projected lifecycle costs with the necessity for new equipment to develop their priority list. Another NDC runs the request list first through bio-medical repair for their input, then to the Information Technology department for their input and then the BDCs. All of those requests are combined and sent to the ERB. A different comptroller said that the requests are sent out to the BDCs first and the directors have the task of prioritizing their equipment requests. Then the directors send their prioritized lists to the ERB. The ERB combines these lists into one list prioritized by the productivity of each BDC, each individualized BDC mission, their OPTAR distribution and their obligation rate. Lastly, another NDC's ERB prioritizes equipment lists based on the life expectancy of

equipment. Life expectancy is the number 1 criteria for this list. All equipment closest to the end of its life expectancy, usually within two years, is on the priority list. The reason for the two year cut off is that at two years, the equipment needing replacement can be put in the POM. In two years, the funds for equipment replacement will be put into the budget just as the equipment's life expectancy is reached. The last command had to ask for a one-time $2.5 million addition to their budget to bring all expired equipment up to speed and start a normal schedule for replacement using the POM. Another comptroller revealed how equipment is prioritized for "end of the year dumps" of funds. He stated that each BDC sends a list of requests based on #1 priority and then #2 and #3. Then the XO of the NDC reviews each list and makes a new list of #1's, #2's and #3's. He takes the liberty to rearrange the priorities of each BDC as he sees fit. If he thinks one of the BDCs #1 is actually a #3 for the NDC as a whole, he will put it in the #3 list. The final prioritized list is created at the discretion of the XO, not exactly according to the Executive Steering Committee's (ESC) interpretation of the command's mission.

Interpretation and Analysis: The equipment list is a major tool for commands to be able to get extra funding above their typical operating funds. It is critical for the operation of the NDCs that this tool is used effectively. The utilization of this tool provides equipment that works efficiently, allowing the command to provide the care it is intended to give. Equipment prioritization lists should not strive to be equitable for each command within the NDC. They should consider the

mission of the NDC as a whole. The life expectancy of the equipment appears to be the best indicator of replacement priority. This variable not only assures working equipment but it also utilizes an important budgeting instrument, the POM. This life expectancy list is maintained within the Defense Property Accountability System. It is therefore important to bring this system up to speed and update it often enough to utilize it effectively. This, in itself, is a monumental task. The downside of using life expectancy is the lack of a motivating determinant. If BDC performance is a factor in determining equipment priority, then the equipment priority list would be a powerful motivating tool since every director wants newer equipment. The problem arises in developing an equitable system for comparing performance among BDCs. As for having one person develop a prioritization list, it would be extremely important for that person to be kept abreast of all the different BDCs and their situations to allow that person to have the latest information on which to base his decisions.

Question: What types of reimbursables do you collect?

Response: In general, the treatment of Coast Guard personnel is the most common service that is reimbursed for most NDCs. At overseas locations, NDCs receive reimbursed funds from treating Department of Defense Dependents School (DODDS) personnel. Nonetheless, the bulk of reimbursables come from the Coast Guard. Another comptroller said that they do bill foreign militaries for servicing their personnel and the VA system but receiving back those funds can take time.

Interpretation and Analysis: Reimbursables are consistent across the commands surveyed. The Coast Guard seems to the most reimbursable entity for services provided. For some commands, being able to be reimbursed for services provided for the VA and foreign military would be a big boost. A good example is NPS. In NPS's dental clinic, even the foreign military officers receive treatment. The costs for their treatment are charged against a specific line of accounting (LOA) set up for this arrangement. Theoretically speaking, that line of accounting is funded by the foreign governments of foreign students. NPS dental clinic, or NDC Southwest (the parent command of BDC Monterey) should be reimbursed for its expenses. Whether it does receive reimbursement is totally another matter. For that to occur, though, changes would have to come from authorities higher than even the HSO level.

Question: Do you receive additional funding for being a training facility?

Response: The interviewees who belong to a training command responded affirmatively to this question, mainly because it is part of their mission.

Interpretation and Analysis: The training facilities do receive extra budgetary funds for training purposes because they indicated that training is a part of their command's mission. This, in itself, is not proof that the core missions of commands do influence the amount of funds they will receive for their budget. This addition to the

budget is part of their budgetary base. They can receive additions to their base for training if a new program is developed or if there is a significant increase in the amount of training or students they need to provide for. In that case, the increase does need to be justified as the annual base. Typically, an increase to the budget for those increases in training does become a part of the commands base. As previously stated, the training commands also receive reimbursable dollars for the use of their facilities.

Question: How do you budget for staff travel for training?

Response 1: Travel is budgeted first for operational officers. Staff officers get second priority.

Response 2: Basically, all dental providers are required to have at least one continuing medical education (CME) trip. Added to that are the executive site/ assist visits for the directors. The CO, XO, and I monitor and question any excessive requests from the BDCs. If not justified, we adjust the requests down accordingly.

Response 3: I receive travel request inputs from the directors through the budget call. All the inputs are consolidated into one spreadsheet. This spreadsheet is then compared to last year's. Any adjustments or discrepancies are brought up at that time. The rule is one CME trip per year per provider. The other staff officers (i.e., MSC officers) are also entitled to travel in a year.

Interpretation and Analysis: It is important for all officers to get the opportunity to receive continual

professional training. For the dental providers, it is especially important that they keep up with the necessary CE because it is required for them to keep their license valid. The last command had an especially good idea of reviewing the inputs against the previous years.

Staff travel can be an exorbitant cost. It was noted by one of the comptrollers that if more funds are requested during the mid-year review, the first category to be scrutinized by the BUMED authorities is the command's travel funds. If travel funds are found excessive as compared to the past year's, BUMED orders the NDC in question to shift funds from travel to whatever AG or SAG they are asking money for. It is important that the dollars be spent efficiently. A control is especially important on this particular fund to ensure that the dollars spent are truly necessary.

The command in response 3 has a good control system for staff travel. That comptroller said that he compares the travel plan draft for the upcoming year to the previous years. The question now is whether the previous year's travel plan is a good basis for comparison. Suppose that command's CO in the previous year discouraged TAD travel and he limited the travel of his staff to within the immediate geographical area. If that command receives a new CO whose philosophy on TAD travel is the opposite of his predecessor's, then there could be a huge difference between the new travel plan compared to the previous years. HSO and BUMED are more inclined to think that if last year's travel funds were enough for the command, then that amount should be enough for the upcoming fiscal year.

There was one command that stated that the CO and XO questioned “excessive” requests but did not have a formal system of identifying and defining “excessive”. The task of defining what is “excessive” easily falls on the NDC comptroller. He could convince the CO and XO that staff travel is not high in the list of priorities from the HSO or BUMED points of view. As stated above, if more money is received for staff travel for this fiscal year and the NDC requests (during the mid-year review) more funds to “keep its doors open” to its patients, then most probably, BUMED will order funds to be shifted from that command’s staff travel. In effect, some dentists in the command will have to take their CME travel to a location closest to the command, instead of the more popular locations chosen for professional conventions.

Question: How do you budget for contingencies?

Response: The NDCs do not specifically budget for operational contingencies (e.g. troop deployment to a ship or with the Marines, Authorized Dental Allowance List (ADAL) maintenance) because these do not fall within their funding authorities. Most of them interpret contingencies as unexpected occurrences (e.g. catastrophes like plane crashes, earthquakes, emergency leave, etc.). As far as these are concerned, NDC comptrollers do not feel these significant contingencies occur often enough to be planned for. Additionally, planning is difficult because of the unpredictability of the events. Despite saying that they did not really need a separate budget for operational contingencies, they all had a method for paying for unexpected occurrences like equipment breakdown, repair,

and/or replacement. They also treat these as “contingencies”. One comptroller sets aside extra monies in the form of reimbursable dollars to use for such unexpected event. Another comptroller uses the CO’s reserve funds for contingencies. There is no set amount. The comptroller said that the CO’s reserve is comprised of money held back after the BDCs’ OPTARs have been distributed. Another comptroller held some funds back from what the BDCs requested for to pay for “showstoppers” or unexpected events that might keep the clinic from operating. Another comptroller said he relied on supplementals throughout the fiscal year or asking HSO for additions because they typically hold some money back for contingencies. When asking HSO for additional funding, it is imperative to ask only for tangibles and not “pie in the sky” or you will never get it.

Interpretation and Analysis: Operational contingencies do not appear to be a great concern for the NDCs, mainly because it is difficult to budget for something that is unpredictable. If the additional money really is necessary, they feel comfortable that the funds will be available from BUMED or HSO, especially in cases of unexpected missions (e.g. evacuation of the Kurds from Iraq). Despite that, they still do leave some “slack” in budgeting the money for “just in case”. The unexpected occurrences that NDCs usually face do not tend to be extra deployments (which do not affect NDCs too much) or catastrophes like September 11th. In the latter situations, NDCs feel comfortable that they will be supported by the HSO. With all of that in mind, it appears that each NDC has its own unique way for providing for immediate relief.

The best idea is to leave some extra funds in reserve be it by leaving a little slack at the end or by holding some from the BDCs' OPTARs. Both methods probably affect the same accounts relatively the same.

Question: When do you start the POM process?

Response: Some comptrollers start as early as January and others start as late as June, two fiscal years before it is due.

Interpretation and Analysis: Commands start the POM process according to about how much work they need to do to prepare for it. Some commands treat it as a routine part of every fiscal year while others truly try to maximize the opportunity. The more the command prepares throughout the year, the less they have to do at the time of preparing the POM. If the ESC continuously meets and the members clearly communicate the details of new programs and issues that need to be included in the upcoming POM process, then the easier it will be for all key personnel during the POM data submission process.

Question: Describe the POM process.

Response 1: (In all commands surveyed, the actual POM process is initiated by the HSO.) A spreadsheet that is sent to him from the HSO is filled out. The information is based on a list of programs that were developed by the ESC. Inputs are not solicited from the BDCs. Rather, these programs are constantly discussed among the members of the ESC, to include the BDC directors.

Response 2: A different comptroller does solicit inputs from the directors of the BDCs. The comptroller consolidates the inputs into a written format indicating the issues and the cost analysis studies done. More specifically, that comptroller said that he would POM all items seven years old or more and at least $500,000. The strategy is to POM three years in advance and get the money on the ninth year, in the month of October of the life cycle to replace the equipment in the tenth year. It is necessary to POM for any additions to the base budget.

Response 3: One comptroller felt that BUMED tasked HSOs to ask all commands for the same data to insert in the POM. These issues influence all of Navy Dental and not one specific command. The goal is to standardize processes.

Interpretation and Analysis: The POM is an important process that can be utilized by commands. The key is to be prepared, organized and be able to justify requests.

Question: How do you justify your priorities when requests are marked?

Response: The comptrollers all agreed that a letter is the appropriate format to provide reclamas for marks. The marks are usually received in August and the turnaround is very fast. The call could be on a Friday afternoon and the answer needed by the end of the day. One comptroller stated that the occasion has risen where neither the CO nor the XO were available and he had to make the call on the reclamas.

Interpretation and Analysis: Because the example given in the above paragraph is a possibility, it is important to

have a firm knowledge of the requests so a justification can be easily formulated before they are sent to HSO. When the marks are received, the required turnaround will be fast and extensive research will probably not be an option. This is especially true when marks are received on a Friday afternoon, and response is required within 24 hours (as some of the comptrollers in Navy Medicine's Fiscal and Supply school mentioned). It would behoove the comptroller to have that information already available. Being ahead of time greatly helps the comptroller. It is imperative that he know the thoughts of the CO for the issues in question. In the instance where the CO is not available and a decision needs to be made, the comptroller should be ready to provide such response in a timely fashion.

Question: What is your philosophy on how to justify a reclama?

Response 1: One comptroller stated that their HSO had a template on-line that the comptrollers can use to formulate Cost Benefit Analyses to justify their marks. This Business Case Analysis method assists the comptrollers by providing the data necessary for the HSO to make a decision and putting it in a format that enables them to more easily compare it with other requests.

Response 2: This comptroller emphasized that he focuses on changes in staffing needs, workload and/ or requirements to defend his reclamas.

Response 3: This NDC comptroller stresses the economic benefits (i.e., increased efficiency) of the proposal.

Response 4: Another comptroller said that marks were rare and that the budgeting assistant on staff has only done one justification (or appeal) in the last 20 years! In other words, he does not have any experience in submitting reclamas during his tenure there.

Interpretation and Analysis: It is illustrated by the similar responses what data are important to include in a reclama. The appropriate analysis is essential in the fight for needed funding. The funding will always be less than optimal and the resources will go to the ones who can best make their case for the money. Cost benefit analysis is a significant tool to show that the requested funds will be used more effectively by your command than others. A copy of the BCA can be seen in appendix 1.

Question: How do you receive your funding and how do you know which requests were funded?

Response: All comptrollers concur that funding is received from HSO quarterly via the funding document NC2168. The funding document indicates by Budget Activity Groups how much funding each command received for each program, the ceilings, floors, and which funds are fenced.

Interpretation and Analysis: This process was the same for all commands surveyed. The NC2168 stipulates whether funds are fenced, have ceilings, or floors. An example of a fenced amount is money received by a particular NDC for the Recruit Sealant Program. Money allotted for that program cannot be used for any other purpose. That money also has a ceiling. It varies from one NDC to another, but for this particular NDC, the ceiling for that program was

$199,000. An example of funding with a floor would be the outsourcing condition of Dental Laboratory support. For the same NDC in the previous example, the minimum amount to be spent for outsourced dental laboratory support was $100,000 for this fiscal year.

Question: What is your budgeting base and how do you determine it?

Response 1: One response was that the base could differ from year to year. The comptroller determines the base using the Annual Planning Figure (APF) trail on a yearly basis.

Response 2: Another comptroller concurs that it is essential to research the base to see whether the command's requests were funded or not within the base. The research may have to go back four or five fiscal years.

Response 3: Another comptroller explained that the budget is based on previous year funds and not zero based budgeting, but was not sure how to find the base.

Interpretation and Analysis: Not all comptrollers know their base nor do they know how to determine it. Some felt it was more imperative than others to have that knowledge. It is essential for comptrollers to know their bases so that they can identify what has already been funded and how much additional funding will be needed to accomplish vital missions that have not been adequately funded. This is especially true during the mid-year review or when in contact with HSO or BUMED to obtain more funding. This also enables commands to see if any funding shortfall in a particular program limits its efficacy in accomplishing the

mission than if it were funded more as the command originally proposed. A comptroller who does not know his base can easily lose his credibility among the comptrollers in HSO or BUMED. He can inadvertently ask for more funds, and in the process lose credibility when confronted with the question, “How much is (was) your base?” Knowing how much was received in the past is important when asking for more funds. Figure 8 in the following page clearly describes how the comptroller of an NDC determines his base from year to year.

In determining his base(s), he keeps track of all his funding receipts, disbursements, reasons for expenses made from a certain fund, which might cause him to ask for more money in case of a category funding shortfall. It cannot be emphasized enough that attention to every little detail in all of a comptroller’s accounts is very important and useful.

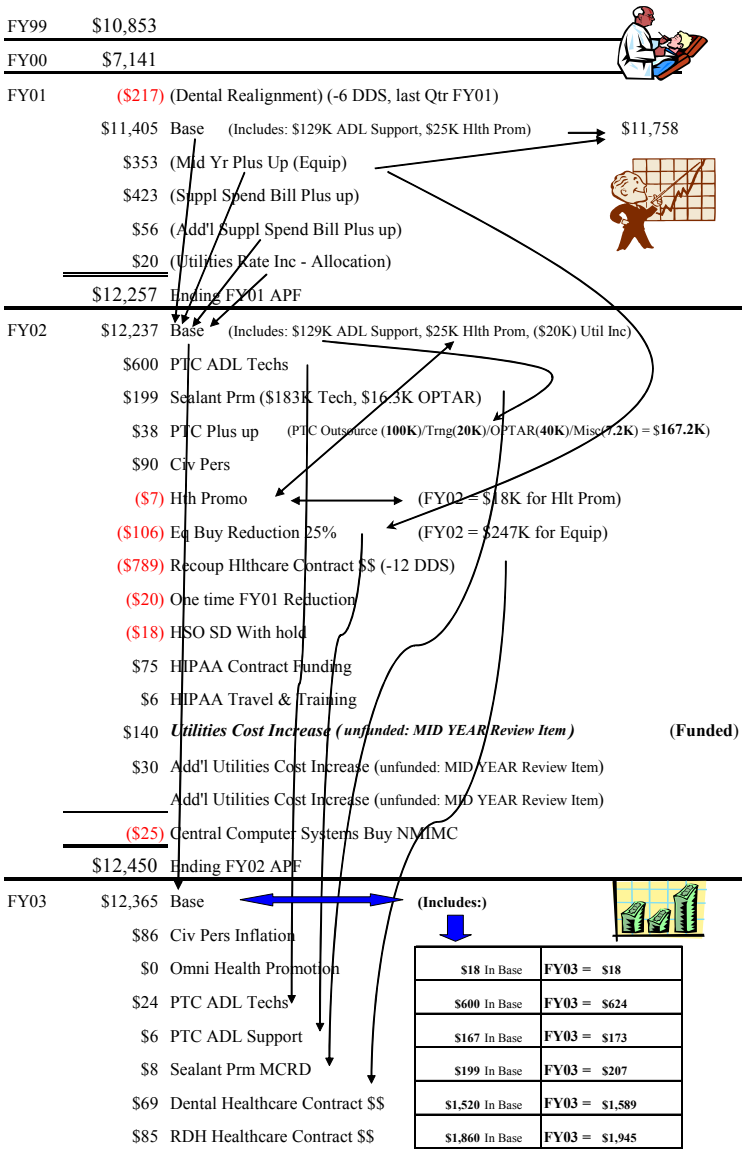


Figure 8. Base Determination Illustration.

C. DENTAL CENTER BUDGET EXECUTION

The following section pertain to budget execution in NDCs.

Question: Do the Branch Dental Clinics receive their entire OPTAR at the beginning of each quarter?

Response: (Most comptrollers surveyed do give the entire OPTAR amount at the beginning of each quarter,

unless the new fiscal year is initially funded under a CRA. In such a case, then the prior year's funding limits are used as the expenditure guideline, excluding new programs.) A comptroller reasoned that if the BDCs knew that the comptroller was saving some funds for the third month, the BDCs are often careless enough to go ahead and spend thinking that the NDC will "save" them. An exception was one comptroller who did not give the BDCs their full funding in the first month of the quarter. This enables him to control the spending rates of the BDCs. Because of this, he closely monitors the BDCs' expenditure throughout the quarter, and reminds them when they are spending more than they are supposed to at that point of the quarterly period.

Interpretation and Analysis: When and how much funding a BDC is given for their OPTAR allowance can be used as a type of spending control. This tool can be effective in managing the spending of the BDCs and ensuring that they execute the funding responsibly enough to make it last throughout the quarter. Withholding funds from BDCs does not empower the BDCs to make proper decisions nor does it help them learn to manage their own funds. Perhaps both methods are correct based on the experience of the comptrollers with their particular commands. Some BDCs may need more restrictions than others. For the most part, BDCs should be responsible enough to manage their respective funds.

Question: How do you determine the amount of OPTAR funds to hold in reserve contingencies?

(Some comptrollers surveyed do not hold back any OPTAR funds as a contingency reserve.)

Response 1: One comptroller called the reserves “work request adjustments”. That comptroller said that the CO directed her to shave 5% off all OPTARs to save for equipment at the end of the year.

Response 2: Another comptroller said he would set aside $20,000 of a $5 million quarterly budget for equipment. Overall, $1.1 million was distributed to the NDCs for consumables/ OPTAR and $80,000 was held in reserve for unexpected minor equipment purchase (if it is beyond repair), an example of a “fact-of-life” issue. He said that the $80,000 was based on historical anecdotal evidence that approximated the need for $80,000 of reserves. He said that the $80,000 was enough for smaller equipment. Any single piece of equipment between $25,000 and $100,000 can be requested from NAVMEDLOGCOM. Anything over $10,000, the comptroller would contact the HSO comptroller.

Interpretation and Analysis: Most comptrollers have their own method of determining if they need a reserve fund and how much reserve they need to have. These decisions will most likely have some guidance from the CO or XO of the command. A reserve of funds for minor equipment is important and it should be based on some analysis, even if that analysis is simply historical data. One of the previous examples showed how a CO used the reserve fund to cut the budget of BDCs. This cut was made after the budget had been formed and executed. This occasion was not an attempt to limit funds to one place and use somewhere else, but was a type of control to manage how the funds intended for the BDCs are spent.

Question: How do you monitor execution rates?

Response 1: One comptroller bases his monitoring on the trial balance that is performed daily, using the Standard Accounting and Reporting System-Field Level (STARS-FL). He monitored the expense rates (expenses/ obligation) and the obligation rates (obligation/ appropriation) as well as estimate reimbursables. This particular comptroller monitored the fund status report of the BDCs on a monthly basis.

Response 2: Another comptroller said that she regularly used the Status of Funds report from the Fund Administration and Standardized Document Automation System (FASTDATA) to monitor the obligation rate. The Status of Funds reports are handed out to OPTAR holders twice a month with a target obligation rate at the top (determined by her fiscal office) so that the OPTAR holders can determine for themselves if they are under or over obligated.

Response 3: Another comptroller monitored spending on a weekly basis. Every OPTAR holder (usually the Supply Petty Officers in the BDCs) in his command kept track of his or her balances like a checkbook. Then, those OPTAR holders met with the comptroller once a week to compare their balance with his, which was based on STARS-FL.

Interpretation and Analysis: There is not an enormous difference between the tools that comptrollers use to analyze execution rates. The Fund Administration and Standardized Document Automation System (FASTDATA) is a software program that tracks spending for the commands and is a valuable tool. By using this tool, comptrollers can

get an estimate of where they stand. Additional monitoring of OPTAR holders is necessary to ensure that they are tracking their spending and that they are not spending too much or too fast. A difference tends to lie in how much monitoring is enough and how often. For example, if funds are distributed for the entire quarter, then monitoring should be conducted more often than every three months. The question is if the monitoring should be done on a monthly, bi-weekly or weekly basis. If BDCs are located further by distance and have less exposure to the comptroller, perhaps tighter monitoring is necessary to prevent OPTAR holders from feeling as if they are too far away to be managed. By our survey, the NDC with BDCs located the furthest away had the monthly monitoring. Another hypothesis may be that the NDCs with the most OPTAR holders have less time to monitor them and therefore have fewer meetings than the NDCs with less BDCs. In our survey, the NDC with the most BDCs met most often. Perhaps the number of meetings to monitor spending is actually more of a personal preference of each comptroller and their personal feeling of how much is needed to retain command. These meetings are a form of control to OPTAR spending. The meetings are to make certain that OPTAR holders spread their expenditures throughout the entire fund period as originally planned. Comptrollers should base the number of meetings directly upon the amount of control needed. They should not be afraid to have too many if that is what is really needed but also should not have more than is necessary.

D. DENTAL CENTER MID-YEAR REVIEW

The following section contains question and responses regarding how mid-year review is conducted in Navy Medicine.

Question: How is a mid-year review conducted?

Response 1: A comptroller surveyed informed us that mid-year reviews are done annually in the March to April time frame. All commands belonging to a certain HSO are gathered in a function room. Their top five requests are projected on a screen along with the mid-year numbers. Each request is questioned by M8 and his staff.

Response 2: Another comptroller added that fact-of-life issues are the only appropriate issues to be brought up at this time.

Response 3: Another comptroller expounded that when NDCs send their top five priority list to the HSO, the HSO compile a top five list from all of the top 5 lists sent to them.

Most, if not all, comptrollers mentioned that it is very important to “sell” your issue to the HSO. In order to obtain the funding you need for your command, the comptroller has to convince the BUMED authorities using every little detailed fact to back his claim. There are two keys to effectively selling your issues to HSO. First, it is imperative to use metrics and data to justify your point. Those who use data to best validate their needs are the ones who get the extra funds. Second, it is also important to research your base to make sure you were not already funded for your particular issue in your base (see Figure 8 above). It may be necessary to go back four or

five fiscal years because the base can change from year to year.

Interpretation and Analysis: The mid-year review is a vital event in the fiscal year for every command in the Navy, to include every NDC. BUMED conducts its mid-year review for the whole claimancy by ordering every comptroller in Navy Medicine to an off-site Resources conference. Beginning in FY 2002, all COs and Commanders of MTFs and DTFs are also invited to be in this conference. The whole group is divided among the HSOs they fall under. Each group is placed in a conference room, where they are seated at a U-shaped table. In front of them is projection screen where HSO and BUMED comptrollers project each command's five funding issues. Once shown on the screen, each comptroller is asked to justify the specified needs.

This is a second chance to get funding for issues that each NDC cannot provide for. Fact-of-life issues occur for every command and it is essential to fight for the funding to alleviate those issues and save funding for other issues that can greatly improve the quality of service given by the NDC. The best strategy is to know where you are, what you need, and why you really need it. Because there is never enough funding for everything, you need to show why your need is the most important. In that case, it is important to know your base, know why your issue truly is a fact-of-life issue, and be able to justify its necessity with data analysis. Usually, the question is "What do you need to keep you operating up to the end of the fiscal year?" Any statements in response to that question will be closely scrutinized, thus making it imperative for the comptroller to be ready for this event. Needless to say,

it is best to be truthful in these sessions. A comptroller's reputation and credibility are usually at stake here, not to mention his command's.

Question: How do you prepare for a mid-year review?

Response 1: One comptroller surveyed revealed in detail how he prepares for the mid-year review. First, he said that he starts at the beginning of the fiscal period in October. When the APF is received from HSO, the comptroller tells the BDCs how much funding they will receive for which program. Then, the comptroller tells the BDC to keep a list of any issues of what was not originally funded for the fiscal year and issues that come up the first six months of the fiscal year. These are "must have" issues. It is important to anticipate questions about your list and to have answers for them. The key is to review the differences between the APF the HSO gives at the beginning of the fiscal year and the inputs given to HSO previously. The discrepancies are the unfunded requirements. If you include them in an attempt to get them funded, you must present new data analysis more convincingly.

Response 2: One comptroller reiterated the need to prepare even before the tasker (for the list) is sent out from the HSO. Basically, these issues are those that are above and beyond the NDCs operational and maintenance funding. The issues need to stem from a requirement and not be for non-mission related programs that a command wishes to implement.

Interpretation and Analysis: The preparation for the mid-year review is the key. Some comptrollers stressed the need to start very early and be prepared. Make sure that the issues stated in the top five list are really appropriate. It could be damaging if an NDC requests an inappropriate issue in front of peers and leaders at HSO and BUMED. It is vital to have analysis to defend your issues and be prepared to articulate your points. One comptroller said that that advice could be the difference between getting funding for your request or not.

E. CHAPTER SUMMARY

This chapter displayed the responses that five NDC comptrollers gave when asked specific questions about the budget formulation and execution process. They also offered information concerning the mid-year review process, how they prepare for it and the impact it plays on budgetary decisions. For some of the questions, the responses were very much alike. In these situations, it can be argued that the procedure is either very stringently laid out in documentation or that the process does not lend itself to personal adaptation for efficiency. In many instances, responses from the comptrollers were differentiated and some were more efficient than others. For the most part, the situation dictates which method is most efficient in different circumstances and according to different management styles.

IV. ANALYSIS OF PERFORMANCE MEASURES USED IN DENTAL CENTERS

A. THE PURPOSE OF PERFORMANCE MEASURES

1. Philosophy of Performance Measures

In the strategic management of an organization, it is important for that organization to have the following established: a stated, unified purpose for its existence, a future-state goal it is striving for, a process to create and deliver its products or services, controls to ensure that the processes are aligned with the organization's purpose, and performance measures to analyze how efficiently and effectively it is fulfilling its purpose, and whether it is moving toward its desired future state or not. Robert Simons says, "…effective managers rely on performance measurement and control systems to set direction, make strategic decisions, and achieve desired goals." [Ref 3]. He further suggests that it is less necessary to have performance measurements and controls for very small businesses because the number of staff personnel is so few that it is easy for managers to keep employees moving in the proper direction. A Naval Dental Center's staff is numerous and performs vastly different jobs at several segregated locations. These reasons make it imperative for NDCs to have performance measures and control systems to make certain that employees are moving in the same direction and fulfilling the overall organizational mission.

A strategic plan for an organization consists of four main principles: a mission, a business strategy, performance goals and measures, and actions. [Ref 3] The

following diagram illustrates the logical progression of the four principles. [Ref 3] The organization uses SWOT analysis to assist in developing the mission and business strategy. SWOT stands for the strengths and weaknesses of the organization and the opportunities for and threats to the organization within its industry.

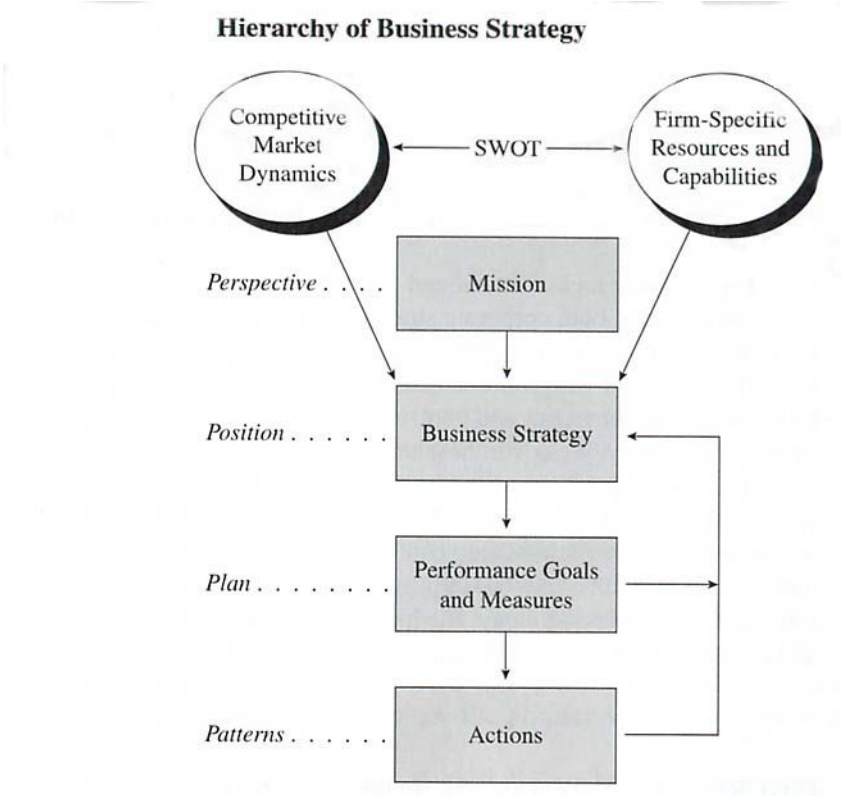


Figure 9. Hierarchy of Business Strategy.

The mission is the goal of the organization and the direction towards which it is moving. It describes where the organization is at the present and where it wants to be. The mission is detailed in a mission statement, which communicates the essence of what the organization wants to be in the eyes of the stakeholders.

The business strategy is focused on two points. These are creating value for customers, and differentiating the product or service from competitors. For the NDCs, there is no true competition (in the business sense of the word) for it is a government entity providing a service to its constituents and it is the only provider of its particular services. Thus, it is very important to create and measure value for the customers they serve. Although NDCs do not compete with other dental clinics in the civilian world, they are still in competition with other government entities for scarce resources.

The next step is the plan. This step creates the goals and the plan to achieve those goals. Performance measures are the tools to measure goal accomplishment. The measurements ensure assimilation of the plan, and evaluate how effectively the stated plans are implemented. Performance measures tell an organization if it is moving in the anticipated direction and when it has achieved its goals. Moreover, the system cannot achieve ultimate performance without a system of feedback linking the action step with the mission. The system of feedback is illustrated in the Bottom-up or Emergent Strategy, as shown in Figure 10 [Ref 2].

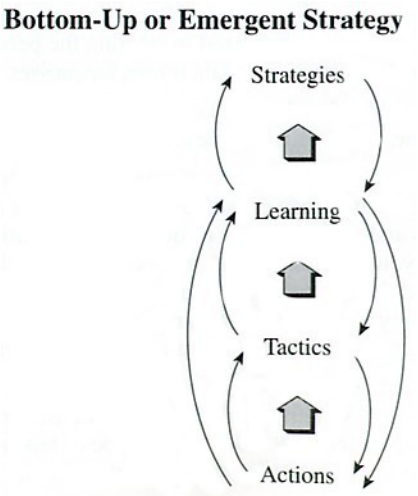


Figure 10. Bottom-Up or Emergent Strategy.

The premise behind the emergent strategy is that "strategy can be planned, but that it can also emerge in unexpected and unanticipated ways" [Ref 2]. The most successful organizations are the ones that are flexible enough to recognize changes in their business environment and adapt. In order to adapt an emerging strategy, the organization must be able to recognize the opportunity. That can only happen with performance measurement and feedback.

For an organization, the purpose behind mission planning and business strategy is to utilize resources most efficiently. Budgeting and fiscal planning is the tool organizations use to manage those resources and best implement them into the strategy. Performance measures play a large role in ensuring that those resources are influencing employed most proficiently.

2. Performance Measures in Government

Budgeting in the public sector can be described as a constant fight for limited resources. In the current information age, the media has more ability to detail to the general public the spending habits of local, state, and federal governments. A cynical citizenry demands more value for the tax dollars they are providing. The general state of the modern economy forces also influences taxpayers to demand lower taxes and more value for taxes spent. These forces drive domestic government agencies to fight over shrinking tax revenues and meet increasing demands, and they must do it in the light of increased publicity. Therefore, performance measures in the public sector serve a dual purpose. First, top managers must justify to constituencies how responsibly they are spending the public funds entrusted to them. Second, they must use performance measures to influence the amount of the "tax revenue pie" that is leftover. To move the federal government in that direction, Congress passed the Chief Financial Officer's Act of 1990 and the Government Performance and Results Act (GPRA) of 1993. For this study, the latter piece of legislation is particularly influential.

The GPRA mandates the use of performance measurements in government agencies to improve the overall process. "Under the Government Performance and Results Act of 1993, the federal government embarked on a performance measurement experiment that may lead to performance budgeting." [Ref 1] Performance budgeting goes beyond incremental annual increases and is less drastic than zero-based budgeting. The concept is to measure the performance

of programs and entities to more efficiently distribute limited governmental resources. It is the method of accomplishing the proverbial “more bang for the buck”. The CFO act will eventually provide for auditable financial statements of what was bought for the tax dollars that are spent by governmental departments. The GPRA goes beyond simply listing what was purchased with which set amount of funds. The GPRA “will eventually provide agency strategic planning linking mission statements to performance measurements and dollars.” [Ref 1] More important, on a philosophical stand-point, the purpose of the act was to alter federal agencies’ focus “from inputs to outputs and outcomes, from process to results, from compliance to performance, and management control to managerial initiative.” [Ref 1]

This change in philosophy is crucial to the modern government adjusting to the current society. The citizenry of the United States is no longer content with paying taxes to the government and hoping for services as a result. It wants to know what it is getting for the income it is sacrificing. The United States has a legacy of having a fear of “big government”. Since the 1930’s and 1940’s, a lot of those fears subsided as the federal government grew to provide more services for the general public. The federal government in the 1960’s and 1970’s started to utilize critical analysis systems in the budgeting and spending process with the assistance of Secretary Robert McNamara’s planning and budgeting system for the Department of Defense. With the end of the Cold War in the 1990’s, the general public started to ask for their government to do more with less. In the example of the DoD, the Congress

pursued a “peace dividend” from the DoD after the Soviet Union and the communist threat had ended. All of these factors play into the importance of efficiently spending and documenting how those funds were utilized.

The shift from a process mentality to an outputs and outcomes mentality presents new challenges. First, it is crucial that all entities in the government sector have a mission and vision established to present the direction that the organization intends to proceed. Eliciting input from the bottom channeling up to top management is the proper method to develop an effective organization mission and vision. This is a vital step to ensure cooperation and implementation. On the other hand, that upward feedback takes more coordination, time and effort than the typical top-down mandate method. Second, it is essential for government agencies to quantify their outputs and outcomes. They must be quantifiable to be measurable. In the public sector, this can be very difficult. For the military, readiness is an essential outcome, but the question lies in how readiness is measured. For the dental commands, dental readiness is the goal. Quantifiable goals must be developed to make certain that the mission and vision are achieved. GPRA emphasizes that performance measurement is critical to the budgeting process. The budgeting process must be the link between performance measurement and the strategic planning and management process. [Ref 1]

3. Initial Results from the Mid-1990’s Studies

The initial pilot studies performed in the mid-1990’s provided analysis concerning the early implementations of

GPRA. The early results showed reliance upon customer service and satisfaction. This is one illustration of a measurement that does not rely upon an organization having to “count widgets”. The advantages cited by participants in the pilot studies were: improved planning, more effective administrative control, decentralized decision making, improved public relations from clearer program information, better focus on the activities of the organization, and provision of more precise quantitative measures. [Ref 1] These factors work together to make organizations more effective and efficient with the resources utilized. Organizations used to focus on the processes of governmental service. The philosophy was that because the organizations exist and are providing services, they must be doing well for society. They had no way of critically reviewing the outcomes they were producing. Additionally, they could not justify the dollars spent for those outcomes because the funds were not linked to outcomes.

Not all of the analysis of GPRA in the pilot programs was positive. There were disadvantages to GPRA. Performance budgeting was not equally applicable to all organizations. Also, organizations had a difficult time agreeing on appropriate sets of performance measures and many indicators proved to be inappropriate. Third, performance budgeting could identify problem areas in wasteful agencies but it did not increase efficiency by itself. Another disadvantage was that measures of effectiveness and outcome are extremely difficult to develop and get agreement. Fifthly, it was much more expensive in terms of staff time and developmental costs of

monitoring indicators. The smaller agencies in particular had a more difficult time finding the funds and staff-time to be able to effectively implement the new system. [Ref 1] Despite the difficulties, agencies that fulfilled the mission of GPRA were able to use the budgeting process to link performance analysis with strategic planning.

B. DESCRIPTION OF PERFORMANCE MEASURES AND THEIR GENERAL PURPOSE

The remaining sections of Chapter IV will attempt to review how the process of performance budgeting is being implemented in Navy Dentistry. This section in particular will list the performance metrics developed and monitored by BUMED and consider the other performance measures that exist at the NDC level.

1. BUMED Mandated Performance Measures for all Naval Dental Centers

BUMED's Navy Dentistry office developed a set of metrics for NDCs to track and report back through their respective HSOs. The following is a list of those metrics and what they measure. [Ref 8]

a. Operational Dental Readiness (ODR)

This is perhaps the most basic metric that Navy Dentistry has. It shows the minimal status of dental maintenance for all active duty Sailors and Marines to be operationally fit. It measures the percentage of patients classified as Class 1, 2, 3, and 4 over the total number of patients for that NDC. DoD (Health Affairs) set the ODR standards at 95% for all the services to have its personnel at classes 1 and 2 by fiscal year 2001. Basically, the

goal of this metric is to achieve operational dental readiness.

b. Operational Dental Readiness of Recruits

This metric is a subset of letter (a) above and reflects ODR among the newest personnel in the Navy and the Marine Corps. The Navy and Marine Corps recruit approximately one hundred thousand new accessions every year. Because of the huge numbers that pass through the recruit depots every year, it is essential to start and track the dental care these recruits receive in the boot camps. The recruits receive two exams during their stay in boot camp. The first one is performed in the first month. Any needed dental care is provided by the BDC in the recruit depot, within the extent of their capabilities. The second exam is performed close to graduation.

c. Dental Health

Dental Health is defined as the total number of Class 1 Sailors and Marines in the active duty force. This is the ultimate goal of Navy Dentistry. Although currently there are no directives or regulations that set a standard for Dental Health, Navy Dentistry has set out in the pursuit of increased dental health because it is the “right thing to do”. This metric’s key drivers are leadership, education (health promotion), and creating increased demand for dental health.

d. Dental Prophylaxis for Active Duty Personnel

This measures the quarterly number of adult prophylaxes provided to active duty patients divided by the

number of prophylaxes that would be needed in order for each patient in the population to receive one cleaning per year times 100. It is called the “prophy rate”. Because Navy Dentistry emphasizes prevention, this metric was formulated to evaluate Navy Dentistry’s ability to provide one prophylaxis a year to active duty members. It also indirectly measures Navy Dentistry’s promotion efforts in creating a prevention focus among its patients, and patient demand for dental health. The main goal for Navy Dentistry is to provide at least one prophylaxis per year to 100% of its patients.

e. Sealants for Recruits

As the recruits undergo their first dental exams in boot camp, a number of them will be indicated to receive sealants on their teeth. Dental sealant is applied on the teeth to serve as extra protection for dental health. It is the goal of Navy Dentistry to apply sealants on all recruits who were indicated for it while still in recruit training to satisfy ODR. This 100% goal was adopted beginning on fiscal year 1998. This metric is a subset of (j) below, but it is important to isolate this metric in order to keep track of Navy Dentistry’s prevention efforts at the accession levels.

f. Personnel Readiness

This metric measures the readiness level of the NDC staff (who are assigned to augmentation platforms) to perform their operational roles when deployed to their Medical Augmentation Platform (MAP) billets. The administrative and training requirements are designated “R

and T" status. The metric is tabulated and reported quarterly. It measures the amount of full time equivalents (FTEs) spent in training by officers and enlisted personnel within the Dental commands. The training calculated is non-readiness training like dental continuing education (CEU's) and technical training, and any readiness training required to allow personnel to deploy as needed. It is the goal of Navy Dentistry to achieve 100% R-1 or R-2 and T-1 or T-2 status for all personnel assigned to augmentation platforms.

g. Clinical Productivity

The objective of this metric is to determine the productivity of NDCs. The monthly metric is a ratio of dental weighted values (DWV) performed per month per number of FTEs of dental providers available. The American Dental Association developed DWVs. A DWV is a weighted value applied to different dental procedures to equate costs to procedures and increase comparability of procedures. DWVs vary in proportion to the complexity of a procedure. The more complex the procedure, the more FTEs are needed to produce it. This methodology gives a more realistic picture of outputs to the amount of inputs given to NDCs.

h. Expanded Functions Dental Practice (Under Construction)

This metric represents the percentage of dentists "trained" and practicing in an Expanded Functions Multichair Dentistry (EF/MCD) setting. The provider must practice 75% of his time in an EF/MCD environment. This environment is defined as one primary care provider working

in two dental treatment rooms and working in conjunction with three dental technicians (at least two trained in EF/MCD). Navy Dentistry's goals are to have two teams practicing EF/MCD at each command by the end of fiscal year 2003, and 25% of Navy Primary care providers practicing EF/MCD by the end of fiscal year 2004.

i. Laboratory Technician Productivity

This is an efficiency measure that is defined as the ratio of Clinical Laboratory Values (CLV) per month per laboratory dental technician. The goal of this metric is to identify underutilization of laboratory technician among the dental commands, so these can be addressed accordingly. As dental laboratory technicians perform unique and vital functions in dental operations, it is mandated that they be assigned to areas to maximize their time devoted to laboratory duties.

j. Sealant Activity

Navy Dentistry's Oral Disease Risk Management Guidelines direct the placement of sealants for those patients who are classified as moderate or high risk for dental caries (approximately 24% of active duty patients and 70% of the recruit population). This is in line with Navy Dentistry's program to achieve and maintain high levels of oral health through strong emphasis on prevention of dental diseases. This is the ratio of the number of sealants placed per 100 active duty patient seatings.

k. Access to Care

One of Navy Dentistry's goals is to achieve customer and staff satisfaction. This metric measures two aspects of access to care: the percentage of the total population (for which a dental command is responsible) which were given availability within 21 calendar days (SCOPE), and the average number of days wait for each type of appointment (SEVERITY). The need for corrective action is most indicated when both SCOPE and SEVERITY are high. All dental commands report this metric to MED-06. Monitoring access to care enables Navy Dentistry to identify increases and decreases in patient demand for certain procedures. This metric drove the design of new programs (e.g., Multi-chair dentistry, expanding dental technician functions) to allow general dentists to broaden their scope of practice, which will lead to increased access to care for all procedures.

l. Patient Satisfaction

In late 1998, the Tricare Management Activity (TMA) and DOD approved a new survey instrument designed to solicit satisfaction ratings from all patients of military dental treatment facilities. The information gained was used to improve internal quality improvement initiatives, to assess the impact of changes in operating procedures, and to provide feedback to providers and patients. This Patient Satisfaction metric is the mean of the results for questions 13 and 21 below:

13. "All things considered, how satisfied are you with the dental care you received during today's visit?"

21. “All things considered, how satisfied are you with the clinic’s ability to take care of your dental needs?”

This metric is used in line with Navy Dentistry’s goal of achieving customer and staff satisfaction.

m. Staff Satisfaction (Under Construction)

This metric measures the results of a survey conducted among Navy Dentistry personnel completed in May 2001. The questions asked were grouped into the areas of Retention within the Organization, Job Match, Job Satisfaction, Organizational Support, Job Stress, Job Alienation, and Organizational Trust. The purpose of this survey is to identify areas that show Navy Dentistry’s strengths and weaknesses in providing high quality dental care.

n. MEDRUPMIS Effectiveness (Metric Under Construction)

This metric represents the percentage of valid reserve dentist requirements that are successfully filled using the Medical Reserve Utilization Personnel Management Information System (MEDRUPMIS). This metric is an effectiveness measure of MEDRUPMIS and reserve support. This metric is reported quarterly for each dental command along with associated workload Dental Weighted Values (DWVs)/Full Time Equivalent (FTE).

2. Dental Center-Specific Measures

NDC commands developed the following metrics to provide performance information. The separate commands formulated and used these metrics in addition to the ones mandated by BUMED. These metrics were for their own use and not necessarily reported to BUMED. [Ref. 14]

a. Command Income

This metric measures the "revenue" of the NDC by department or clinic. The procedures performed in the clinics were given a dollar value. Dollar values were estimated with reimbursement rates used to retrieve funds from NATO and U.S. Coast Guard forces treated. By giving each procedure done in the clinic a theoretical dollar value, clinics' revenues were calculated. This metric was used at one particular NDC to increase competition among clinics. The NDC gave incentives to the clinics, such as special liberty, for achieving the highest revenue. Another metric is the Profitability metric. It is very similar to the command income metric in that it measures the revenue the NDC would have generated if they charged DWVs for their services. Per Capita Income is another similar metric. It is calculated by dividing total revenue by the total number of clinical FTEs reported in that period. The objective is to maximize per capita revenue generated by the number of available staff per clinic.

b. One-Stop Shopping

The purpose of this measure is to promote higher levels of patient satisfaction and provider efficiency. It is based on the premise that most patients due annual exams

either needed or desired to have a cleaning or prophylaxis ("prophies"). If the clinic provides annual check-ups and prophies during the same clinic visit, then the clinic could see more patients based on only having to do half the number of patient check-in routines and other administrative tasks. Patients lose less work time by only having to make one trip instead of two, hence the phrase "one-stop shopping".

c. Comparison of Provider Average Productivity

This metric was utilized to measure the efficiency of multi-chair dentistry, a new initiative. The metric measured provider productivity in the form of DWVs divided by the number of FTEs. The new initiative was to provide each provider with multiple treatment rooms instead of the military standard of one treatment room per provider. This initiative allowed providers to see more patients in a day by not having to wait until support staff checked patients into the room. When the provider finished with the patient, the next room would be ready with the next patient. The metric was designed to measure if and how much more productive the initiative was for every FTE of staff used to carry it out. Another metric very similar to this one is the Number of Multi-chair Dentistry Chairs Employed. This metric measures the raw number of treatment rooms used in the multi-chair dentistry initiative.

d. DWVs Per Clinic per Month per FY

There are a number of variations of this metric. This metric is, in essence, the metric included in BUMED's metrics. The difference between this metric and the one in

BUMED's Composite Metrics is that it compares the current FY's production with previous FY's production. This metric helps NDCs check for various varieties of trends and verify if the overall trend of production is increasing or not. One large NDC has a special iteration of this metric. They created a query engine for a database which will allow them to see the total number of DWVs by provider, provider type, by clinic, and divided by FTEs. It can also organize the data by month and fiscal year. This metric gives the NDC total productivity with flexibility of "drilldowns" to answer specific questions and aid in further research. Another very similar metric is the Total Production Compared to the Target. The special aspect of this metric is it measures month by month the accomplishment of the command in relation to its yearly goal. This metric accentuates that metrics are most effective when measuring the accomplishment of a goal or the achievement of a strategy. Another productivity drilldown is the Percent Delta (change) in Total Production. This measure charts the percent change in total production from previous fiscal years. This is an attempt to normalize the data and analyze "apples to apples".

e. Patient Seatings per Clinic per Month

This metric measures the raw numbers of patient seatings per clinic. Basically, a seating is a dental appointment that does not have the DWV weighting to it. This measure presents the raw total number of visits into a clinic. This metric would allow a clinic to look at patient flow which would be distorted if investigated using the DWV measures. Also, when comparing this metric with

DWV metrics, a clinic can determine their complexity of care which might have financial consequences if different clinics see more complex patients.

f. Patient Satisfaction

This performance measure analyzes the satisfaction of patients with the different aspects of their visit to the clinic. BUMED's measures only look at questions 13 and 21 on the Tricare Patient Satisfaction Survey, which ask about the overall satisfaction of patients with their visit. One NDC looks at other questions that are more specific to the patients' satisfaction. The following are the additional questions analyzed by one particular NDC:

Q.16 Wait for an Appointment

Q.20 Wait in the Office before the Appointment

Q.10 Courtesy of the RDH

Q.4 Was your Problem Understood?

Q.6 Did the Provider give an acceptable explanation?

Q.7 Time with the DDS

Q.11 Thoroughness of the RDH

Q.12 Quality of the care provided by the RDH

Q.3 Courtesy of the DDS

Q.5 Overall thoroughness

Q.8 Helpfulness of the staff

Q.9 Quality of care

g. Percentage of Sealants Indicated

This metric measures the overall number of sealants that have been identified as needing to be performed in all patient seatings. This metric is an extension of the BUMED metric “Sealants Placed per 100 Patient Seatings”. The importance of this metric is that the NDC that uses it is located in a major recruiting area. Its purpose is to measure how recruits get dental attention upon entry into the service and prevent future problems.

h. Percentage of Sealants Complete

This metric is an extension of the previous metric mentioned. It is important to measure the percentage of those sealants identified as needing to be performed and how many were actually performed. This measure is essential to ensure that dental care is complete and patients are not missed.

i. Re-Enlistment Rate

This metric tracks the rate of enlisted personnel in the NDC and satellite branch clinics that re-enlist when their obligated service time expires. This measure helps management know the level of work satisfaction among employees in the NDC.

j. Percent of Appointments Filled

This metric shows the total percentage of appointments that were filled by patients. It examines the utilization of the providers’ clinical time. This metric can also play a part in the amount of funding given to

clinics. If this percentage is low, it is possible that the corresponding clinic has more resources than they need.

k. Income Statement

The income statement measures the amount of "revenue" that the NDC and clinics would receive if they collect the DWVs and the total amount of costs of resources used.

l. Number of Class 3's by Specialty of Care

This metric shows the total number of class 3's that need periodontics, oral surgery, endodontics, or prosthodontics. Each category has its own total of class 3 identified patients.

m. Total Number of Class 3 Patients and Class 4 Patients

This metric is the total number of class 3 and class 4 classified patients within the NDCs responsibility. This is the extension of BUMED's DHI and ODR metrics.

n. Quarterly "Good Ideas" Forms Submitted

"Good Idea" forms are an instrument where any person in the command can bring an idea or initiative to the ESC for discussion. This allows all members of the command to have a voice in the direction of the command. This method of team building is effective at getting every one to feel a part of the organization and that they can make a difference in the improvements of the command. By tracking this metric, the ESC is ensuring that they are

allowing members of the command to feel like they are a part of the strategic planning process.

o. Percent Failure Rates

Failure rate is when patients “fail” to show up for a scheduled appointment. Productivity and utilization of the provider’s time is directly impacted by patients’ absence for appointments.

p. Quarterly OPTAR Used

This metric measures the amount of OPTAR within the NDC that has been obligated so far in the quarter. This metric is a quick look at the overall execution rate of the NDC as a whole.

Table 1 is provided to show the performance measures each NDC interviewed were using.

	NDC A	NDC B	NDC C	NDC D	NDC E	NDC F
Revenue metrics	✓				✓	✓
One Stop Shopping	✓					
Multi-chair Metrics	✓				✓	✓
DWV Drill-downs			✓	✓		
Patient Seating Drilldowns			✓			✓
Additional Patient Satisfaction			✓			
Sealants Indicated			✓			
Sealants Complete			✓			
Re-enlist Rate			✓			
Appointments Filled				✓		
Income Statement				✓		
# of Class 3’s by Complication					✓	
# of Class 3’s and Class 4’s					✓	
Employee Initiated Change Forms					✓	
Failure Rates					✓	
OPTAR used					✓	

Table 1. Various NDC Performance Measures.

C. HOW PERFORMANCE MEASURES ARE USED IN THE BUDGETARY PROCESS

The following information was collected through the same survey and interviews presented in Chapter III. This information specifically dealt with the development of mission and vision statements and strategic goals in NDC, the development of performance measures and how all of these things are tied into the budgetary process.

Question: Do you have a command mission? Is it posted?

Response: All commands responded to having a command mission statement. The interviewees stated that their mission statements were posted on bulletin boards readily visible in the command. One comptroller added that his command had the mission statement printed on little reminder cards that were distributed to all command personnel, with the purpose of disseminating this vital piece of information command-wide.

Interpretation and Analysis: BUMED assures that all commands have a command mission statement. The importance of this is explained earlier in this chapter. Mission statements are the key building blocks to strategic planning and budgeting. What is just as important as having a mission statement is that the whole command is aware of what it is and uses it as a compass to retain its bearings.

Question: How are command goals formulated?

Response 1: The ESC annually formulates the goals.

Response 2: The ESC meets at a 2-day off-site planning session annually to develop the annual goals. The purpose is to shape the BUMED plan into the command plan.

Response 3: The command goals are formulated by the ESC and branch clinic directors annually. The HSO facilitate the annual goal formulation process. It is a three-day event to determine the NDCs needs, the most important areas of focus, and how to align NDC goals with Navy Dentistry's goals.

Interpretation and Analysis: The command goals are typically created by the ESC of the command and are done annually. BUMED's annual plan comes down through the HSOs first. The NDCs' Executive Steering Committees (ESCs) meet to create command specific goals in support of BUMED's goals. BUMED helps to give direction for the NDCs. Then, the NDCs develop the plan for how they particularly can move in that direction and how they can fulfill BUMED's mission.

Question: How do you ensure that command goals are strategically aligned with the command mission?

Response 1: The command created a formal set of "dashboard" metrics. This set of performance measures form a quick analysis of what is occurring in the command. These metrics are reviewed monthly to check if the command is still moving in the direction of accomplishing its goals. Also, the ESC has two Medical Service Corps officers (MSCs) as members. The MSCs fill the roles of keeping the goals and strategies in line with the mission. They are assigned these roles due to their administrative

and fiduciary responsibilities over the funding of the command. The philosophy of this comptroller was to never give a definitive “yes” or “no” to inquiries about paying for a new program or goal. He would simply ask the requestor whether this was in support of the command’s mission and goals, and what he (the requestor) was willing to forego in terms of expenditure.

Response 2: It all starts with the aligning the command’s mission with the mission of Navy Dentistry. Once the mission statement is aligned, then the ESC formulates the command goals in accordance with the mission. If the goals are met, then the command’s mission will be fulfilled.

Interpretation and Analysis: It is evident from the responses that the interviewees have a basic understanding of strategic planning and the uses of performance metrics. Response 1 shows that the Medical Service Corps Officers in the Command Executive Steering Committee were utilized for their administrative experience and acumen in the formulation of goals and aligning these to the mission. However, no matter how often the ESCs meet to try to align their goals to their mission, there is still no definitive way of guaranteeing that the mission and goals of the organization are strategically aligned. Having one or two members of the ESC be designated aligners of goals and mission is not a failsafe plan. Such is the reason for the use of performance metrics. If the metrics indicate a positive result, but other indicators (patient satisfaction, lawsuits, low re-enlistment rate) show that there is something wrong, then there is a misalignment among the strategies, goals, and the mission.

Also we noticed that the interviewees provided basic answers to our question, especially in the case in response 2. The lack of differentiated responses to this question can be attributed to several possibilities. First, it can be because the interviewee did not have much experience, or did not have much opportunity to participate in his command's strategic planning sessions. Second, it may also be because his command does not properly conduct strategic planning meetings. Third, their commands do not hold such meetings at all. Lastly, it may just be because the interviewees just wanted to give a brief answer. Trying to determine the reason at this point is purely speculative on our part and pointless. Notwithstanding the short answers we received, we give the interviewees the benefit of the doubt that their separate commands engage in the productive evolution of strategic planning.

Question: How much of the overall performance measures formulated by your command are mandated by BUMED and how useful are they?

Response: Many of the NDCs stated that most of the performance measures that the NDCs tracked are BUMED mandated. One comptroller stated that for his command, the BUMED mandated goals constituted about 40% of the performance measures his command used. He said that about a third of those BUMED-mandated metrics are helpful but the remaining two-thirds were not.

Interpretation and Analysis: A large portion of metrics that are being monitored by NDCs originated from BUMED. According to the commands surveyed, many commands

use the BUMED Composite Metrics as their sole source of performance measures. Still, many other commands have felt the need to formulate new metrics and monitor these as well, to expand their analysis of their command. From an outside view, it would appear that BUMED would have a difficult time developing all-inclusive metrics that would be holistically pertinent at the NDC and BDC levels. Therefore, it would be necessary for the separate NDCs to develop performance measures that follow the distinctive nature of business performed at their levels. Also, all of the commands surveyed stated that they developed mission statements and strategic goals. Some of these mission statements and goals may be more lengthy or extensive than others, but they all basically support the mission of the Navy Medical Department. If such is the case, then the commands with more extensive mission statements and goals have to develop separate performance measures. This needs to be done in order for them to analyze their unique individual command goals and mission statements.

Question: How do performance measures influence the budgeting process?

Response 1: I do not believe they do.

Response 2: They do not have much influence. The standards for the metrics are set with approval of the BDC directors.

Response 3: Normally, the DWV metrics are taken into consideration when developing OPTAR amounts. When asking for more funding, HSOs compare facilities' DWVs from previous period to the present period.

Interpretation and Analysis: The responses from this question vary among the different comptrollers surveyed. Most of them stated that performance measures did not play a role in their command's budgeting process. The reason being was because they thought budgeting at their level played a small role in strategic planning. The Annual Planning Figures (APF) is given to them by BUMED through the HSOs and the NDCs have little or no control over the amount they receive. Also, they see increases in the budget tend to be incremental, regardless of performance. Furthermore, they think performance is not tied to funding decisions made in BUMED and that NDCs do not survive on the revenue that they actually collect. Few performance measures address any financial topics because of this.

Perhaps these comptrollers lost sight of the big picture, that the composite metrics tell BUMED where the resources need to be redirected in order to maximize the NDCs' capabilities. As a consequence, NDCs can then see increases in their APFs, with fenced funds with ceilings or floors to spend on new initiatives. To this effect, performance measures really do affect the budgeting process.

Question: What improvements would you make to the performance measure process?

Response: One comptroller stated that all metrics in her command are clinically focused. While this is the primary focus, some metrics from other areas of importance (e.g. fiscal, manpower, etc.) and a broader spectrum would be nice to have. Another interviewee stated that his

command has a lot of metrics and when viewing all of these, it is easy to forget what these metrics are for, and whether most of these really are significant enough to be monitored.

Interpretation and Analysis: Performance measures for NDCs need to focus on more than just clinical workload. Manpower issues are essential to having a well-trained, efficient staff. Fiscal-oriented metrics show how the command's monetary resources are spent. By cutting costs and saving funds in some areas (e.g. consumables), commands can find alternative uses for the funding to spend for other programs for increased productivity and efficiency.

D. THE USE OF PERFORMANCE MEASURES IN DENTAL CENTERS

As a result of GPRA, performance measures have played a bigger role in the management of Naval Dental Centers. The implementation of GPRA has successfully been pushed down through the Navy Department, through BUMED, and into the NDCs. Part of this implementation has been a result of BUMED required metrics. These metrics measure the performance of each NDC. The NDCs are able to review those metrics and make sound decisions based on the information. BUMED's mission and strategic goals are given to the NDCs annually. The NDCs are encouraged to plan how they can implement these goals and possibly create local goals that will assist in the accomplishment of BUMED's mission for Navy Dentistry. The process is in place. The purpose of GPRA was to change the budgeting system from a process orientation to an outcomes orientation. Through this research, it appears that strategic planning is not equally implemented among the NDCs.

Some commands only use the Composite Metrics developed by BUMED as their source of performance review. When this is the case, they fail to measure the local mission and goals that they have developed. As mentioned before, performance measures help to measure strategic goal accomplishment and strategic goals are essential for mission achievement. Each NDC's mission statement and strategic goals are unique, for the commands and patients they are responsible for are different from the other NDCs. If a command has its own mission, it should have its own goals and separate performance measures for those goals. BUMED's composite metrics focus on production, patient and employee satisfaction, and resources. The NDC specific metrics deal with a lot of the same issues, but could go into more detail. That is essential for the NDCs for them to make better management decisions. It is important for the NDCs to try to look beyond BUMED's goals when necessary but not create more performance measures than necessary. Performance measures need to measure a specific goal or be a control for a specific process. Anything other than those two points is a waste of resources.

Strategic budgeting is budgeting to achieve the mission and goals of the organization. Resources are always a limiting factor in the decision making process. Therefore, budgeting should play an important role in strategic thinking and decision making for the organization. Also, performance measures should play an important role in the determination of the distribution of resources. In order to get "more bang for the buck", it is important to concentrate resources where they will produce the most output. This is output planning.

For the most part, this research shows that not all NDCs give importance to performance measures equally. Table 1 shows a discontinuity in NDC specific performance measures. While this shows that NDCs differ in their focus, it also shows a lack of ability to connect budgeting with performance measure analysis. A direct connection would attribute to more similarity among lists of performance measures at each command. Some commands do not have any additional metrics other than the composite metrics. As mentioned earlier, one comptroller gave his opinion that only about a third of BUMED's metrics are useful for his command. Notwithstanding, his opinion still does not prove that the NDCs' goals and missions are disconnected from BUMED's. In our opinion, it merely means that the Composite Metrics should not be used as a sole source of performance measurement for any single NDC, and that each NDC should formulate metrics more suitable for its unique mission and goals.

When posed the question of how performance measures influence the budgeting process, some comptrollers surveyed did not feel that they really did. To a certain extent it is true, possibly the APF they receive from HSO is a figure that those in the command did not have any influence over. Another possible reason why they answered negatively was because they, as comptrollers, did not participate in the performance metric formulation process. If this is true, maybe because the metrics were already established prior to their arrival at the command.

On the other hand, other respondents answered in the affirmative. We think they responded that way because they are aware that the metrics that they provide BUMED

influence the amount they receive in the form of the APF. A comptroller provided another example wherein performance measures influence the budgeting process. A BDC director approached him requesting more funds. The director claimed that his BDC experienced an increase in workload and that was why all of his funds were already obligated. In response to the director's request, the comptroller checked his metrics in his system to verify the BDC's workload. His files indicated that the BDC's workload had been at the same level for the previous twelve months. Shown that his justification was inaccurate, the BDC director withdrew his request, at least temporarily.

The importance of performance measures cannot be overemphasized in this point. These mathematical indicators, though time-consuming to prepare, are feedback gauges that tell the NDCs if they are on the right track or not. Although the composite metrics that BUMED requires are applicable to all, they do not adequately tell the entire story of every NDC's performance. Because every command is unique in mission due to its patient constituencies, every NDC should have its own unique metrics to give the former an image that should reflect its vision for the future.

E. CHAPTER SUMMARY

This chapter detailed the role that performance measures should play in organizations, specifically in budgeting, and how they are being used in Navy Dentistry. The purpose of performance measures is to tie together the mission and goals of an organization. GPRA was developed to move government organizations from a process to an

outputs focus in budgeting and analysis. NDC commands track performance using BUMED metrics and metrics they develop for themselves. Comptrollers offered their views on the role of performance measures in the budgeting process.

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V. CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter will address the primary and secondary research questions, and provide recommendations for further research in this area.

A. PRIMARY RESEARCH QUESTION

The primary research question "What are the budget formulation and execution processes of Naval Dental Centers" is answered in Chapters II and III. Chapter II outlines the overall PPB process and the budget formulation and execution process. These processes heavily influence how NDCs do budget formulation and execution. First, most of the NDC level processes are mandated by the HSO and BUMED level. Second, the requests for inputs are generated from these levels and most program and equipment funding cuts occur above the NDC level. The first section of Chapter III addresses most of the generic budgeting processes of NDCs. Additionally, Chapter III gives a more in depth view of individual NDC specific processes. Chapter III illustrates that several procedures in the budgeting process are handled differently among NDCs. It would be difficult for one style to work equally well in all situations. NDCs perform in distinctive environments and with slightly different missions. Though this is true, NDCs could learn valuable lessons from each other about how each goes about this process. The adoption of the "best" budgeting practices from a different NDC could result in increased efficiency.

B. SECONDARY RESEARCH QUESTIONS

Question 1: What is the PPB process in conjunction with Naval Dental Centers and what is the role NDCs play?

Chapter II describes the PPB process in DoD and Navy Medicine. More specifically, the first section of Chapter III addresses the PPB process for NDCs. NDCs must submit their requests through the HSOs to BUMED. The process is not too different than many other field administrating activities within DoD. NDCs must balance the need for funds to support initiatives sent down from BUMED to "optimize" their services with the need for funds for new programs that expand beyond the scope of BUMED's mission. NDCs have individualized missions to account for the varying issues they must address.

Question 2: What are the core missions and scope of demand for Naval Dental Centers, their branch dental clinics, and what are the most important issues that generally are funded? What factors affect the disparity between the funding NDCs request and what they actually receive?

An NDC's core mission is to ensure that all the Sailors and Marines within their area of responsibility are brought to the highest state of dental readiness. This mission translates into all Sailors and Marines achieving at least a class 2 classification before they deploy. The three key issues are prevention, sealants and annual exams. This extends from the NDCs down to their respective branch dental clinics. The new programs and essential equipment that support that core mission are typically the issues

that most likely receive the funding. Equipment replacement has historically been the key issue that receives the priority in funding. Recently, BUMED tasked NAVAL MEDICAL LOGISTICS COMMAND (NAVMEDLOGCOM) to purchase more of the required equipment for NDCs. NAVMEDLOGCOM is now responsible for all purchases of over $2500. Therefore, most of an NDC's equipment replacement is now subject to a centralized prioritization of essentially all equipment replacement. In the past, NDCs were able to prioritize their own replacement and sacrifice where necessary to support their greatest needs. Now, they are subject to a central authority who is not familiar with each NDC's unique requirements and concerns. Also, the new process will delay the timeliness of replacement. This new policy has hindered NDCs in their ability to replace equipment.

An important part of the budgeting process is the mid-year review. From an outsider's viewpoint, it appears that the mid-year review is a higher priority than even the fiscal year budget formulation. In the surveys and interviews, it appears that the comptrollers put more effort and careful analysis into preparing for the mid-year review than the annual fiscal year budget call. Comptrollers seemed more likely to use data to defend requests at the mid-year review. Starting last fiscal year, BUMED funds the TAD travel COs and comptrollers, from all medical and dental commands, take to attend the mid-year review conference. When interviewed, most comptrollers said the "fact-of-life" issues were the issues most likely to receive funding. This actually only pertains to mid-year reviews when issues need to be

addressed before the next fiscal year. Since mid-year review issues were typically the kind of issues that comptrollers first brought up, perhaps it can be shown that the mid-year review receives more effort during the interviews. If most annual budgets are considered incremental for the most part, then mid-year reviews will receive attention since they provide a venue where they need to "fight" for funding and need to defend all requests with facts. It does appear that for the most part, performance measure analysis performed by HSOs and BUMED attributes to the disparity between what NDCs budget request and what they receive.

Question 3: What are the performance measures used by the NDCs and how are they used in the budgeting process?

BUMED created a set of metrics for all NDCs to collect and for BUMED to use. The Composite Metrics are to assist BUMED and HSOs in making decisions in comparing different NDCs. This tool illustrates the performance of NDCs in different phases of mission accomplishment. All NDCs appear to at least review these metrics periodically. Some comptrollers found some of these metrics to be useful. For the most part, comptrollers did not use BUMED's Composite Metrics for making business decisions. A number of commands did create their own metrics to supplement BUMED's metrics. If NDCs developed addendums to BUMED's mission and annual plan for their own specific command, then it would be essential for NDCs to also have additional metrics to measure those addendums. Typically, performance measures are not the driving force behind budget formulation and execution at the NDC level. Almost all

comptrollers interviewed even admitted that. However, it does appear that comptrollers use performance measures in making some budgeting decisions. Examples in Chapters III and IV showed that comptrollers did use performance measures to shift OPTAR amounts, defend OPTAR funding distribution, defend reclamas and fight for funding at mid-year reviews. The interesting part of the interviews is the fact that comptrollers seemed not to notice that they were using performance measures in the budgeting formulation and execution processes. Perhaps when asked about performance measures and the budgeting process, they automatically reference the annual budgeting process and inputs collected by HSOs and BUMED. Since HSOs do not ask for corresponding data to defend those inputs, comptrollers assume they are not used. A possible misconception may stem from the lack of direct contact in the collection of input and lack of feedback in the distribution of funds between HSOs and NDCs.

Question 4: How does the budgeting process and performance measure utilization in the dental centers of the Navy compare with those of the Army and Air Force?

This question could not be addressed due to a lack of data.

Question 5: How useful are these performance measures in this organizational environment?

Chapter IV addresses the strategic environment of organizations. It also explains how organizations can effectively create a system of mission and vision

formulation, goal and strategy implementation, and performance measurement and control systems to evaluate mission accomplishment. Chapter IV also summarized how this process works in Naval Dental Centers as a whole. The research reveals that most NDCs do adapt BUMED's mission to more effectively fit their mission, create annual goals to promote their own mission and establish performance measures to review their performance. Most NDCs interviewed do have performance measures beyond BUMED's mandated metrics. What is not completely clear from the research is if performance measures and controls are strategically linked to the mission and vision of the organization. Comptrollers interviewed did not seem to know of any system currently installed in their commands that ensures that particular strategic link. Also, our research does not verify that the NDC-specific performance measures are linked to particular goals or initiatives currently in process. The answer to that question is beyond the scope of the data collected.

C. RECOMMENDATIONS FOR FURTHER RESEARCH

1. A comparative study of how the budgeting process and performance measure utilization in the dental centers of the Navy compare with those of the Army and Air Force could further illustrate the uniqueness of budgeting formulation and execution in the military sector.

2. A follow-up study of performance measures actively followed by NDCs and their relationship with annual goals and NDC mission would be appropriate. The goal would be to ensure that performance measures are used as controls to actively measure concurrent goals of the command. For

example, if a command has sufficiently achieved a particular goal, then the command should review its corresponding performance measure or measures periodically to ensure that it is still within tolerance ranges.

3. A study about NDC-specific performance measures that would have positive application for all NDCs is a future possibility. Conversely, a critical review of BUMED metrics that have little application at the NDC level or little overall use would be appropriate. This study could address the practice of reviewing performance measures simply to evaluate graphs when they serve little strategic purpose.

4. A similar study concerning performance measurement and strategic management in Navy medical units could be applicable.

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APPENDIX A. BUSINESS CASE ANALYSIS

This appendix provides an example of how a Business Case Analysis is prescribed to be written. A step-by-step guide can be found in the Navy Healthcare Support Office website, http://nhso.med.navy.mil/bca/corpus.htm.

BUSINESS CASE ANALYSIS FOR ROBOTIC PRESCRIPTION FILLING SYSTEM

Naval Hospital Corpus Christi
and
Joint Reserve Base Branch Medical Clinic
Fort Worth, Texas

Executive Summary

This Business Case Analysis (BCA) supports the request for $ $$$,$$$ per fiscal year beginning in FY01 to lease an automated robotic prescription filling system for Naval Hospital Corpus Christi (NHCC) and Joint Reserve Base Branch Medical Clinic Fort Worth (JRBBMCFW).

JRBBMCFW is manned to serve active duty and reserve forces, but has absorbed prescription workload from non-active duty beneficiaries following the closure of Carswell Air Force Base Hospital. Subsequently, the pharmacy has experienced a 161 percent increase in prescription workload from FY96 through FY99. This additional prescription workload resulted in ever increasing pressure to maintain satisfactory prescription filling times, stress on pharmacy staff and patients, increased incidence of filling errors and decreased patient contact time to provide patient counseling as required by Federal Law.

NHCC and Branch Medical Clinics (BMC) Kingsville and Ingleside pharmacies undergo cyclic prescription workload with increased prescription volume from October through March. The additional prescription workload results in an increased level of stress on pharmacy staff and may lead to serious prescription errors.

Seven options for alleviating the increasing prescription workload were explored and are discussed in detail herein.

Analysis of the findings discovered during this BCA suggest that if current methods for filling prescriptions continue, the increasing prescription workload will result in unacceptable patient waiting times and increased risk for serious filling errors. Our recommendations calls for leasing the Xxxxxx system to address the under manning in all NHCC Health Care System (HCS) pharmacies, increased volume of new and refill prescriptions and to moderate pharmacy workload peaks. The Xxxxxx system would relieve pharmacy personnel from manual prescription filling tasks and allow them to concentrate on accuracy, patient education and pharmaceutical service enhancement. Procurement of a robotic prescription dispensing system such as the Xxxxxx supports the Command and Navy Medicine's vision of wellness by addressing the need for quality patient care, education, satisfaction and overall pharmacy efficiency.

Background

Pharmacy Technician manning at JRBBMCFW from FY96 through FY 99 consisted of one 8482 hospital corpsman and one TAR Pharmacy Technician. The TAR Pharmacy Technician detached in October 1999 and the billet will remain vacant until spring 2000. Maximum efforts have been concentrated to utilize all available means to fill prescriptions for all eligible beneficiaries in the JRBBMCFW catchment area, including many over 65 years of age. JRBBMCFW has been designated as a BRAC area, making many over 65 year old beneficiaries eligible for the National Mail Order Program (NMOP). Due to vigorous marketing of NMOP by this Command, utilization of the NMOP program increased 384 per cent from FY98 to FY99 for eligible beneficiaries in the JRBBMCFW catchment area. In spite of NMOP, 64,639 prescriptions were filled at JRBBMCFW pharmacy during FY99, an increase of 42.1 percent over FY98.

Pharmacy technician manning at NHCC currently consists of nine of 13 authorized billets. BMC Ingleside pharmacy technician manning is currently two of three authorized billets and BMC Kingsville pharmacy technician manning is currently two of two authorized billets. The average total prescription volume at NHCC is between 800 and 1300 per day, and an average of 910 prescriptions per day from FY96

through FY99. BMC Kingsville has averaged 170 prescriptions per day from FY96 through FY99 and 50 to 60 refill prescriptions per day. BMC Ingleside has averaged 123 prescriptions per day from FY96 through FY99 and 43 to 60 refill prescriptions per day. Percentage of refills for NHCC, BMC Kingsville and BMC Ingleside are 35, 30 and 35 per cent respectively

The NHCC pharmacy requires a robotic prescription filling system to fill NHCC prescription workload and prescription refills at BMC Kingsville and Ingleside. A robotic prescription filling machine would provide increased patient contact time for required medication counseling and provide a mechanism to place the right drug, in the right vial, to the right patient 100 percent of the time.

Scope

The purpose of this BCA is to explore the options available to provide safe and efficient pharmaceutical services to active duty, reserves and eligible beneficiaries in the NHCC HCS and JRBBMCFW catchment areas. The following options are presented and have been assessed to identify the most cost effective and customer focused alternative to cope with an increasing prescription volume while best meeting the needs and safety of all eligible beneficiaries.

Discussion and Findings

The following options were explored:

Option 1: Status Quo – Maintain the existing pharmacy staff and labor intensive manual prescription filling methods utilizing Drug-O-Matic dispensing cells. This option carries an increased risk of prescription errors in manual prescription filling brought on by pressure to maintain prescription filling times and the rapid obsolescence of existing equipment. This is not a viable option.

Option 2: Two additional Pharmacy Technicians be hired to cope with the projected workload increase at JRBBMCFW through FY01 as seen below. Note that additional manpower may be required to cope with additional workload beyond FY01.

WORKLOAD COMPARISON

JRBBMCFW PHARMACY

	Rx Volume*	Rx Tech**	Work Days/Yr***	Rx/Tech/Day
FY96	24773	1	260	95
FY97	38019	2	260	73
FY98	45462	2	260	87
FY99	64639	2	260	124
FY00****	86441	2	260	166
FY01****	115597	2	260	222

* = Data extracted from CHCS

** = Manning based on 8482 Rx Technicians authorized

*** = Based on 52 weeks per year X five days per week = 260 work days per year

**** = Projected workload based on average percent increase or decrease FY96 through FY99

Based on Pharmacy Technicians filling 100 Rx's per technician per day, by FY01, two additional Full Time

Equivalents (FTE) Pharmacy Technicians must be hired. At $13.00 per hour working eight hours per day and 260 days per year, the Command would spend $54,080.00 per year or $270,400.00 for five years to hire additional Pharmacy Technicians.

Option 3:
NHCC to provide 8482 Pharmacy Technician Temporary Active Duty (TAD) support to JRBBMCFW pharmacy. Based on the workload comparison chart in option two and the current JRBBMCFW 8482 Pharmacy Technician staff of two, NHCC must provide one 8482 Pharmacy Technician in FY00 and two 8482 Pharmacy Technicians in FY01 to cope with the increasing prescription workload. The following chart shows the number of technicians required to fill the increasing prescription workload at JRBBMCFW pharmacy. Pharmacy technician manning at NHCC, BMC Kingsville and Ingleside manning and workload may be found in the Background section, page 2, second paragraph.

	Rx Volume*	**Rx/day****	**Rx Tech Required*****	**NHCC TAD Support**
FY00	86,441	332	3	1
FY01	115,597	444	4	2

* Projected workload based on average percent increase FY96 through FY99 (Workload Comparison Chart in Option 2)

** Prescriptions per day based on 52 weeks/year, five days/week = 260 work days/year

*** Total number Pharmacy Technicians required to support filling prescriptions at 100 prescriptions/tech/day rounded down to the nearest hundred prescriptions

The estimated cost of NHCC 8482 Pharmacy Technician TAD support is as follows.

FY00
Per Diem $34.00/day
Lodging $55.00/day
Total $89.00/day X 1 Tech X 365 days/year = $32,396.00

FY01
Per Diem $34.00/day
Lodging $55.00/day
Total $89.00/day X 2 Tech X 365 days/year = $64,792.00

As the parent Command, NHCC is responsible for providing TAD support to BMC Kingsville and Ingleside, as well as JRBBMCFW. Providing 8482 Pharmacy Technician support at the level described above will result in a significantly decreased capability to provide TAD support to BMC Kingsville and Ingleside, as well as reduce pharmaceutical services at NHCC. This option is not viable due to the inability of NHCC Pharmacy to support this level of continuous TAD support to JRBBMCFW.

Option 4:
Increase 8482 Pharmacy Technician Billets at JRBBMCFW. NHCC has requested additional 8482 Pharmacy Technician billets for JRBBMCFW. It is unknown if or when additional 8482 Pharmacy Technician billets will be available for JRBBMCFW to fill the additional prescription workload. Based on FY01 workload projections and manpower requirements in options two and three, two additional 8482 Pharmacy Technicians would be required. The annual cost of additional 8482 Pharmacy Technicians for JRBBMCFW is as follows:

Two E3-E5 8482 Pharmacy Technician @ $27,448 = $54,896

Estimated 8482 SRB/year @ $ 5,000/tech = $10,000

Total/year $64,896

This is not a viable option due to the cost and time period to procure billets for 8482 Pharmacy Technicians at JRBBMCFW. Based on workload projections, it is difficult to ascertain the exact number of Pharmacy Technicians required

to cope with future increases prescription workload past FY01.

Option 5: Yyyyyy system. This robotic prescription filling system has been purchased by other DoD medical treatment facilities and is designed for large volume refill centers and mail order houses. The cost of this system is significantly higher, with an initial cost is $1,140,000.00 including installation, $40,000.00 to $90,000.00 for maintenance per year, and approximately $20,000.00 in supplies per year. The system occupies a large area, requiring up to 200 square feet of floor space per unit, and may require significant modification to the existing facilities at JRBBMCFW and NHCC. This system has a 220 volt power requirement for its compressor and requires special labels, ribbons and vials that must be purchased through the manufacturer. In addition, this system utilizes a single dispensing chute, introducing the possibility of cross-contamination. This system may take weeks to replace existing medication cells due to factory technician calibration requirements.

Yyyyyy Purchase Information

Purchase price, including installation: $1,140,000.00 for one unit at NHCC and one unit at JRBBMCFW.

Annual maintenance support fee: $40,000.00 to 90,000.00 per year or $200,000.00 to 450,000.00 for five years.

Cost of modification to NHCC and JRBBMCFW structures to accommodate the Yyyyyy: Unknown

This option is not a viable option due to cost and potential construction required to install the system.

Option 6: Lease the Xxxxxx

The manufacturers of Xxxxxx indicate that the unit is designed to fill 1000 prescriptions per unit per day. At peak periods during the year, NHCC fills 1300 total prescriptions with BMC Kingsville and Ingleside contributing 120 refill prescriptions per day. Current JRBBMCFW pharmacy workload averages 342 prescriptions per day and projected average workload in FY01 445 prescriptions per day. This data reveals that two Xxxxxx units are required to fill the total prescription workload

at NHCC and refill prescriptions at BMC Kingsville and Ingleside, and one unit at JRBBMCFW. This configuration is fully capable of handling future prescription workload increases.

Xxxxxx Lease Information

Total lease cost for Xxxxxx: $184,440.00/year or $922,200.00 for five years for three Xxxxxx units (includes 6% GSA discount). Price information current as of 02 November, 1999.

Xxxx Lease Information	
Lease of Xxxx/mo	$10,224.00
Maintenance Support/mo	$ 1,290.00
GSA install charge & CHCS interface charge/mo	Included
Total Xxxx Lease Cost/Month	$11,514.00

Xx Lease Information	
Lease of Xx/mo	$ 3,181.00
Computer Interface	Included
Installation	Included
Initial Training	Included
Full Service Customer Support	$ 675.00
Total Xx Lease Cost/Month	$ 3,856.00
Total Xxxxxx Lease Cost/Month	$15,370.00

Note: The Xxxxxx utilizes special labels, a consumable item, at a cost of approximately $3,600.00 per year.

Option 7: Purchase the Xxxxxx system may not allow the pharmacy to keep pace with technology. Purchase of the Xxxxxx requires an up front funding commitment. Automated robotic dispensing technology is evolving at a rapid pace because the market is not mature. The manufacturer estimates that the Xxxxxx system will be obsolete in five to six years. By purchasing the Xxxxxx

Xxxxxx Purchase Information

Total purchase cost for three Xxxxxx units: $722,326.00 for the estimated five year service life (includes 6% GSA discount). Price information current as of 02 November, 1999.

Xxxx Purchase Information	
Purchase Price	$ 432,000.00
Computer Interface	$ 6,000.00
Installation	$ 38,250.00
Initial Training	Included
Full Service Customer Support	$ 76,110.00
Total Purchase Price	$ 552,360.00

Xx Purchase Information	
Three Xx units	$ 109,824.00
GSA install charge	$ 13,642.00
CHCS interface charge	$ 6,000.00
Maintenance (five year contract)	$ 40,500.00
Total Purchase Price	$ 169,966.00
Total Xxxxxx Purchase Cost	$ 722,326.00

Note: The Xxxxxx utilizes special labels, a consumable item, at a cost of approximately $3,600.00 per year.

Conclusions

Option one and two may not be considered viable options unless additional Pharmacy Technicians are hired to cope with the increasing prescription workload. The cost for two FTE Pharmacy Technicians is $54,080.00 per year or $270,400.00 for five years. Even with the additional manpower, the chance for prescription error remains, particularly during peak prescription filling periods. Option two contains an additional problem with the scarcity of civilian Pharmacy Technicians in the Fort Worth, Texas area.

Option three requires NHCC TAD support to include one 8482 Pharmacy Technician in FY00 and two in FY01, in addition to the current JRBBMCFW Pharmacy Technician staff, to fill the increasing prescription workload. This option is expensive, shifts the shortage of 8482 Pharmacy Technicians from JRBBMCFW to NHCC Pharmacy, and significantly decreases the ability of NHCC Pharmacy to provide TAD support to the other BMC’s.

Option four calls for additional 8482 Pharmacy Technician billets for JRBBMCFW. There is no guarantee that additional billets will be available and the time period may prove to be prohibitive. With no stabilization of pharmacy prescription workload at JRBBMCFW foreseen, it is not known

how many additional technicians will be required beyond FY01.

Option five, the Yyyyyy robotic prescription system, requires (1) significantly higher initial funding commitment, up to $1,590,000.00 over a five year period; (2) a higher annual consumable cost and (3) the disadvantage of a structural modification to the NHCC and JRBBMCFW facilities. The significantly higher cost and undesirability of modifying the JRBBMCFW structure make this option cost prohibitive.

Option six and seven provide the best options available. Although total funding outlay for purchasing the Xxxxxx system in option seven is lower than leasing the unit as outlined in option six, ($722,326.00 purchase price vs. $922,200.00 lease price over 60 months). Leasing the system carries several advantages, including upgrades to keep pace with the rapidly changing robotic technology. With the automated prescription robotic dispensing market maturing at a rapid pace and no trade in or salvage value, purchasing the system would potentially result in discarding it at the end of its anticipated five to six year life cycle. Leasing provides the option of upgrading the entire unit, if necessary, at the end of the five year lease period. Both options take advantage of the Xxxx dispensing up to 100 prescriptions per hour using standard prescription vials, holding 200 universal dispensing cells that handle tablets and capsules of any shape or size, and prescription organization capabilities of the Xx. The Xxxxxx is a complete prescription filling system with the ability to fill 100 percent of prescription medications rapidly and accurately.

Recommendations

Option six, leasing the Xxxxxx will easily fit into the existing pharmacy spaces and work flow without modifications and falls in line with the Command and Navy Medicine’s vision of wellness and quality pharmaceutical healthcare for all beneficiaries under our care.

APPENDIX B. DENTAL CLASSIFICATION OF INDIVIDUALS

Dental classifications are used to designate the oral health status and the urgency or priority of treatment needs. An objective dental health assessment of each patient based on an individual risk assessment of the potential for rapid deterioration is essential to provide the moist accurate dental classification possible. In Navy Dentistry, a dental emergency is defined as a condition which causes pain, uncontrolled hemorrhage, acute infection, loss of masticatory function, or significantly impacts a patient’s performance of duties.

The following are the general descriptions of the various dental classes. For more in-depth guidelines and criteria, please refer to Article 101,Chapter 6 of the Manual of the Medical Department.

a. Class 1- Patients not requiring dental treatment or reevaluation within 12 months.

b. Class 2- Patients who have oral conditions that if not treated or followed-up, have the potential but are not expected to result in dental emergencies within twelve months.

c. Class 3- Patients who have oral conditions that if not treated are expected to result in dental emergencies within twelve months. Patients should be placed in class 3 when there are questions in determining classification between class 2 and class 3.

d. Class 4- Patients who require a dental examination. This includes patients who require annual or other required dental examinations and patients whose dental classifications are unknown.

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